This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

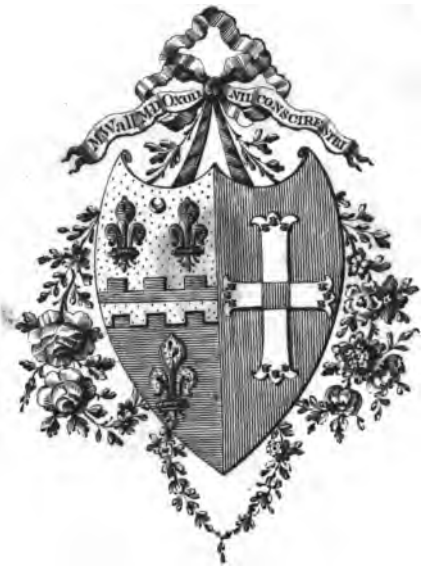
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

Per 72.
R.

Soc. 15084 e. 82/4

1796-7

Per 8a 72.
R.



Soc. 15084 e. 82/4

1776-7

MEDICAL

AND

PHILOSOPHICAL

COMMENTARIES.

By a SOCIETY in EDINBURGH.

Durum. Sed levius fit patientia
Quidquid corrigere eſt nefas. HOR.

VOLUME FOURTH.

PART I.

LONDON:
Printed for J. MURRAY, No. 32. Fleet-ſtreet;
W. CREECH, Succeſſor to Mr KINCAID, and
W. DRUMMOND, *Edinburgh*; and
T. EWING, Capel-ſtreet, *Dublin*.

M,DCC,LXXVI.

THE COMPILERS

OF THE

MEDICAL COMMENTARIES

HUMBLY INSCRIBE

This VOLUME of a Work, intended for diffuſing the Knowledge of MEDICAL and PHILOSOPHICAL DISCOVERIES,

TO HIS GRACE

HENRY

DUKE OF BUCCLEUGH,

Who, while he is deſervedly Eminent for many other Virtues, has merited and obtained Eſteem, as a LOVER and PATRON of SCIENCE.

Non ego te meis
Chartis inornatum ſilebo,
Totve tuos patiar labores
Impune——carpere lividas
Obliviones, eſt animus tibi
Rerumque prudens et ſecundis
Temporibus, dubiiſque rectus. HORAT.

PREFACE.

AT the commencement of our laſt volume, we mentioned ſeveral circumſtances which we foreſaw would neceſſarily tend to retard the publication of the ſubſequent parts of it. We were neither, however, fully aware of the extent to which theſe circumſtances would operate, nor did we then dread other accidents which have ſince had a ſhare in producing the ſame effect. The conduct of every part of this work depends ſo much upon Dr Duncan, that, whatever prevents him from attending to it, muſt neceſſarily retard the publication. And, while for two years paſt, by much the greateſt part of his time has been occupied in academical labours, he has alſo ſuffered no inconſiderable diſtreſs from circumſtances

of a more private nature. Thoſe who are themſelves parents need not be told what muſt be the ſtate of mind of an affectionate father on the death of a beloved daughter. We hope, therefore, that no farther apology will be neceſſary to any of our readers for the late irregularities in the publication of this work. We likewiſe truſt that theſe circumſtances will ſufficiently excuſe us with ſeveral correſpondents to whom we are indebted for valuable communications; and who may, perhaps, imagine that theſe favours have not been acknowledged with that attention which they merited. Although their letters have remained unanſwered, yet they have not been overlooked; and moſt of them will appear in future numbers, in the order in which it ſhall be thought moſt proper to introduce them.

From the circumſtances which we have now mentioned, it may, perhaps, be imagined that we do not, at preſent, ſtand in need of medical obſervations; and that theſe, were they

they even tranſmitted to us, could not appear for ſome time. Although, however, we have been favoured with ſeveral communications, in our judgment to be eſteemed valuable ones, which we have not now room to inſert, yet we think it our duty not to omit the preſent opportunity of ſoliciting farther aſſiſtance. With this intention, it is only neceſſary to remind every attentive practitioner, who is duly influenced, either by principles of humanity, or a ſenſe of duty to the public, that the advantages ariſing from any intereſting medical obſervation, will be much augmented from its being ſpeedily and generally known. And that, when ſuch obſervations are not ſoon put into a proper channel for the purpoſe of publication, they are but too frequently loſt. On our part, we may venture to aſſure thoſe who ſhall favour us with their aſſiſtance, that, if their communications be not hereafter properly and regularly acknowledged, it ſhall proceed from ſome cauſe, affording an excuſe ſufficiently valid.

After the interruptions which have already taken place with regard to this publication, we will not again promiſe, what, perhaps, we may be unable to perform. It is our intention, however, and will be our endeavour, to publiſh at regular intervals, a volume, conſiſting of four parts, every year. But, ſhould the appearance of future numbers of this work be at any time unavoidably retarded, none of our readers will, we hope, from thence infer that the work is diſcontinued.

That the three firſt volumes of this work have been attended with no inconſiderable advantage to the medical world, is, we preſume, but a fair concluſion, from an extenſive and increaſing ſale. And we are happy to think, that we have now the proſpect of being able to render the enſuing parts of it ſtill more uſeful than the former ones. Since theſe Commentaries have been tranſlated into the German language, we have received kind offers of aſſiſtance from foreign phyſicians

cians of eminence in different parts of Europe. From their aid we expect that this publication will derive many advantages. And the communications which we have already received from Dr Hahn of Leyden, Dr Baldinger of Gottingen, Dr Marcard of Hannover, and Dr Gahn of Copenhagen, deſerve a public and particular acknowledgement. As their names are already too well known to the learned world, to acquire any additional fame from this publication, they can be actuated only by the moſt diſintereſted and generous motives.

We omit ſaying any thing of the obligations which we owe to Britiſh practitioners of the firſt eminence. How far, we already ſtand indebted to ſome of thoſe, who are beſt able to render this publication materially uſeful, will ſufficiently appear from the work itſelf. Theſe gentlemen have an unqueſtionable title to expect the ſtrongeſt exertions on our part for rendering it of real value to the public. As far as our abilities will allow, it

ſhall

ſhall be our conſtant endeavour to do ſo. It is by no means, however, an eaſy matter to accommodate a work of this nature to the taſte or judgment of every reader. But, if the utmoſt impartiality and induſtry can afford ſatisfaction, we truſt, that there is no one who will not beſtow ſome degree of approbation on our future labours.

EDIN. 1ſt *Sept.* 1776.

MEDICAL COMMENTARIES.

SECT. I.

An Account of Books.

I.

Phyſiognomiſche Fragmente zur Beforderung der Menſchenkentniſs und Menſchenliebe, i. e. *Phyſiognomical Fragments, intended to promote Philanthropy and the Knowledge of Men. By* J. C. Lavater *of Zurich.* Vol. 1ſt. 4to. Leipſic.

THE work which we have now mentioned, is not in our poſſeſſion. Nor, although it were, are we ſufficiently acquainted with the German language, to be able to give our readers any proper account of it, without much more labour

bour than we could propoſe to beſtow upon it. We imagine, however, that it will be by no means unacceptable to the philoſophical part of our readers, to receive an account of it, extracted from a letter from Dr Marcard at Hannover, to Dr Duncan, which is as follows:

SIR,

A work has lately been publiſhed in this country, which is ſo very extraordinary and intereſting, and ſo juſtly reckoned a phaenomenon in the philoſophical horizon, that I cannot doubt of your being much pleaſed at receiving ſome account of it. The title of this work is, Phyſiognomiſche Fragmente, &c. It contains 276 pages in large quarto, neatly printed, with ſixty-eight copperplates, and a great many vignettes. It is the production of a clergyman at Zurich.

Perhaps no publication has ever met with more paſſionate antagoniſts, and at the ſame time with more warm defenders and well-wiſhers, than theſe fragments did, both in their native country, and throughout all Germany. Without entering into the differences which have been occaſioned by this work, or the objections made to its

its author, I ſhall only endeavour to give you as true an idea of it, as the limits of a letter will allow.

This author does not mean by phyſiognomy that vain ſuperſtitious ſcience which pretends to diſcover the future fate of men from their faces. To uſe his own words, phyſiognomy is to him the ſcience by which we know one's character and qualities of mind from his outſide. Under the outſide he comprehends not only the features of the face, and the figure of the whole body, but alſo the deportment, the voice, the walking, and ſuch like circumſtances.

Mr Lavater propoſes to lay down, in this work, a number of rules, before unknown, which he has diſcovered by long obſervation; by the aid of which, the eye of genius may, with more certainty, judge from the outſide reſpecting the inſide of a man, than he ever can from his actions or communications. The great ſcope of this work is to make men more attentive to the appearance of their fellow creatures; to render the ſigns of the internal beauties of human nature, impreſſed on the outſide, more perceptible; to draw back, with a diſcreet hand, the veil wherewith the inadvertence of men has covered ſome very

very conſpicuous, determinate, and lively expreſſions of human nature; to analyſe the confuſed feelings of what phyſiognomiſts expreſs, which undoubtedly every one, to ſome degree, poſſeſs; and to reduce theſe to more determined ſigns.

The author, however, with great modeſty, obſerves, that he does not preſume to explain all the thouſand lettered alphabet of that by no means arbitrary language of nature, which is imprinted in the face, and whole outſide of men. He does not even undertake to point out the whole beauties or perfections of the human face. He aims only at drawing ſome characters of it, ſo far intelligible, that a clear-ſighted eye may diſcern them wherever it meets with them.

As the author was to lay the ground-work of an intirely new ſcience, and to tread an uncultivated tract, he found it moſt ſuitable to his intentions, to conduct the work on no ſyſtematical plan. He has therefore ſtiled his ſeveral ſections fragments, that the reader may have ſome idea of what he is to expect. The firſt volume contains eighteen fragments. Theſe chiefly treat of the nature, the limits, the imperfections of phyſiognomy, the objections againſt it, and the teſtimonies in its favour. Some are dedicated

to

to the object of phyſiognomy, human nature; and one comprehends phyſiognomical exerciſes. The engravings are diſperſed throughout the work, as the author intends them to illuſtrate any particular dogma. Some of them are done after the drawings of celebrated painters; others are likeneſſes of remarkable phyſiognomies.

I am happy to tell you, that the ſucceeding volumes, in as far as reſpects the engravings, will be highly ſuperior to the firſt; I have already ſeen many of them which are finiſhed. The work will conſiſt of four or five volumes, one of which is to be publiſhed every year. It was intended that a French tranſlation ſhould appear at the ſame time with the original; and I ſee, by the liſt of ſubſcribers, that ſome of my countrymen, the Germans, have fooliſhly ſubſcribed for the French tranſlation of this original German work. But, although ſeveral able pens have attempted tranſlations, they have been obliged to give it up altogether. It has now been found, that a good French tranſlation of this work, is a thing quite out of reach; not from want of phyſiognomical expreſſions, with which the French language abounds, but from the peculiarities of the manly, expreſſive, elegant, and often truly ſublime ſtyle of this maſterly

ſterly writer, which, properly ſpeaking, is crammed with ſenſe. I hear that a Lady has lately undertaken a tranſlation of it; but, whatever her abilities may be, I am almoſt ſure, that, ſomehow or other, ſhe will miſcarry. There cannot be the leaſt doubt that an Engliſh tranſlation would ſucceed better; but where is a perſon to be found, who, together with ſufficient knowledge, poſſeſſes both languages to ſuch a degree as to qualify him for the work?

The author's labours would be entirely fruitleſs, if phyſiognomy were an imaginary ſcience, founded upon credulity only; and if the different phyſiognomies of men had no relation with the qualities of their mind, the inſide with the outſide. He was therefore obliged, in many places, to enter into the diſcuſſion of this queſtion; and I think, that, when I read the book, I met with moſt part of the following thoughts. "Every moment we are acting upon phyſiognomical principles, without being aware of it; and not men only, but the brutes alſo, even inſects know both their moſt convenient food and their enemies by the outſide. What are we doing when we chuſe out ſome fruits as the beſt, or when we prefer one horſe to another, but judging from the outſide

ſide, of the internal qualities. We then certainly act the phyſiognomer. That every man is undoubtedly a natural phyſiognomer, is ſtill more apparent from conſidering the effects which reſult from the firſt ſight of perſons unknown. We are often much inclined to tell our friends, that we do not like the man before us, although we be in no degree acquainted with him. Whoever is an attentive obſerver of what paſſes in his own mind, knows that he no ſooner ſees any perſon, than certain attendant ideas ſucceed the firſt impreſſion, which involve nothing leſs than a judgment over his diſpoſitions of mind, ſo far that we pronounce him to be of a quite different caſt from ſome others of our acquaintance. We cannot, in every caſe, tell exactly why we judge thus, whether it be from his figure, from his eyes, or from his noſe. Nor can we always determine, whether the impreſſion be not from different ideas complicated. This is not to be learned by rule; we judge only from a feeling acquired by experience.

As phyſiognomical practice is ſo general, it cannot be but founded in nature; and one ſhould think, therefore, that it poſſibly might be the ſub-

ject of ſcience. Does not practice always precede theoretical knowledge?

Although it were allowed, that the phyſiognomies of men did correſpond with their qualities of mind; that there were not one trait in the face which had not ſome relation to, or was not the effect of a certain diſpoſition of his mind; although it were allowed alſo, that ſuch a harmony is perceptible by an eye which has ſome exerciſe; yet one would aſk, whether it be not impoſſible to bring ſuch faint feelings to ſuch a degree of clearneſs, as to expreſs them in words; or where the mortal could be found, who, by his piercing look, was able to diſcloſe theſe myſteries; and, if he ſhould endeavour to explain them, by what means could he aſſure us of his not erring, and ſerving up vain ſubtleties in place of truths?

There is a doctrine in phyſic, in ſome reſpects, much reſembling phyſiognomy. It is the doctrine of the pulſe. We may take it for granted, that there is no particularity in the pulſe, however inconſiderable, not even one of the great number of pulſes which Solano de Luque has enumerated, which does not depend on a particular condition of the body, and which may not be looked upon as foreboding a certain iſſue. But we know

know that thoſe who pretended to inform us what each of theſe particular pulſes exactly portends, as ſoon as they entered into minute diſtinctions, told us merely things that were uſeleſs, that were reprobated by daily experience, and that were not worth reading. This did not proceed from the pulſe not being a ſign of the preſent ſtate of the body, and of the events which are to follow, but it aroſe from theſe authors not knowing any thing of the matter; becauſe it was beyond the reach of their faculties to unfold under what circumſtances the pulſus myurus, dicrotos, undoſus, formicans, &c. foreboded this or that event.

Many may, no doubt, be inclined to think much in the ſame manner with regard to phyſiognomy; and I muſt own, that I once thought ſo myſelf. But, upon reading this work, I was forced to change my opinion. I was obliged to confeſs either that there is no ſuch thing as phyſiognomy, or that this author has hit it.

Suppoſe, Sir, that one was to tell you, a certain perſon made the ſame impreſſion upon him, that he did upon you, and ſuppoſe, that, by his ſkilfulneſs in expreſſing the fainteſt feelings in words, he could convince you, that this was

really the caſe; if ſuch a man was farther able to point out to you, why the perſon before him made ſuch an impreſſion upon him, if he was to go through the detail of the peculiarities characterizing the outſide of that perſon, if he told you nothing which contradicted what you felt; and if, upon inquiry, you ſhould find that his judgement was founded on truth, I dare ſay you would have no heſitation in beſtowing upon that man the title of a phyſiognomer. I will, however, venture to affirm, that this muſt often have been the caſe with the readers of the preſent work.

I could point out many inſtances of my being entirely ſatisfied with this author's judgment of phyſiognomies; and, among them, I remember particularly the likeneſs of that famous French compoſer Rameau. But nothing ſtruck me more than what he ſays of two heads, the one of Judas, the other of Chriſt, both from Holbein. Although he be not at all ſatisfied with what theſe heads expreſs, when he goes through the detail of their phyſiognomies, yet he, at laſt, obſerves, they have ſtill ſo much characteriſtic, that, if you were to change names, to write under the head of Judas the name of Chriſt, and the contrary, every

every perſon would at once be ſenſible of the miſtake.

I cannot help adding a few paſſages of this work tranſlated, in which the author apologizes for the ſcience to which he has devoted his labour. But do not believe, Sir, that theſe apologies are owing to the leaſt diffidence reſpecting the ſubject. They are cauſed by ſome objections which were made to the ſeveral advertiſements of this work, the firſt of which appeared about four years ago.

Nobody will maintain, ſays he, when in earneſt, that a ſtrong man can look like a feeble one, a healthy man like one in a conſumption, or one that is phlegmatic, like one that is choleric. He would be thought to rebel againſt common ſenſe, who would venture to aſſert, that Newton and Leibnitz could have looked like madmen, unable to obſerve, or incapable to conceive an abſtract idea. The ſame judgment would be formed of him who could aſſert, that joy and grief, luſt and pain, love and hatred, had the ſame ſigns on the outſide of man, that is, none at all. And the ſame judgment ought to be formed of him who declares phyſiognomy to be an imaginary ſcience.

It is inconteſtible, that the frequent repetition of certain motions of the muſcles, which are inſeparable from certain paſſions and diſpoſitions of the mind, leaves viſible tracks, which are ſufficiently perceptible to become the object of ſcience.

We know, by experience, that nobody is to be found, be he ever ſo ſenſible or ever ſo ſtupid, on whom ſomething, at leaſt, of the outſide of the people he ſees does not, in ſo far, make impreſſions, as to determine his opinion of them, and in ſome meaſure to regulate his behaviour towards them. Every one acts towards perſons whom he does not know, in conſequence of his phyſiognomical ſentiments or judgment. It is that judgment, that ſentiment, from which ariſes compaſſion or delight at the miſeries of people unknown to us. It excites love or hatred, diſtruſt or confidence; it makes us reſerved or cordial.

It has been alledged as an argument againſt phyſiognomy, that it is a moſt fallacious ſcience, if any at all; and that it may occaſion very great miſtakes, ſince thoſe who want to be conſidered as honeſt men, may counterfeit that appearance. But thoſe who urge this objection, do not conſider,

der, that they are uſing the ſtrongeſt argument for the reality of phyſiognomy. For it evidently ſuppoſes, that honeſty has a method of appearing on the outſide. The whole art of diſſimulation is founded upon phyſiognomical principles. Why does the hypocritical villain counterfeit the appearance of an honeſt man, but becauſe he thinks, that people about him know and obſerve the character of honeſty? A true phyſiognomer, however, looks through the veil.

Perhaps, Sir, you may imagine, that I am dwelling too long on an apology for phyſiognomy; and it may be ſuppoſed, that the greater part of the readers of the medical commentaries can have no doubt of the reality of a thing ſo well founded, eſpecially as I find, that ſome of the greateſt Engliſh writers have a high opinion of it; among others, Mr Addiſon and Lord Shafteſbury. The latter, in his eſſay on the freedom of wit and humour, has the following paſſage, when ſpeaking of beauty. "Were the ſubject to be well criticiſed, we ſhould find, perhaps, that what we moſt admired, even in the turn of the outward features, was but a myſterious expreſſion, and a kind of ſhadow of ſomething inward in the temper."

You will, perhaps, rather expect that I ſhould tell you how far Mr Lavater has ſucceeded in reducing phyſiognomy to fixed principles, and what things, properly new, are contained in his work. I thought, however, that, for thoſe readers who had never beſtowed much attention upon this ſubject, theſe paſſages might not be entirely ſuperfluous. It is generally acknowledged, that the beſt thing which has been written upon this ſubject ſince the days of Ariſtotle, is Dr Parſon's Human Phyſiognomy explained; which was one of the Cronian lectures on muſcular motion, and publiſhed in the Philoſophical Tranſactions. But, although that gentleman, in general, lays great ſtreſs on the reality of phyſiognomy, and explodes that trite phraſe, *fronti nulla fides*, with many arguments; yet I find, that what he calls phyſiognomy is limited only to the action of the muſcles, and to the effects which this action cauſes on the countenance. Dr Parſon's phyſiognomy is merely the phyſiognomy of the paſſions. Mr Lavater goes much farther; and the knowledge of Dr Parſons is but a dawning when compared with the light which Mr Lavater ſpreads over it.

This author by no means overlooks the action of the muſcles of the face. But, although it be part

part of his ſcope to frame a notion of the bent of a man's mind with reſpect to the reigning paſſions, as far as they may be gueſſed at from the tracks cauſed by the frequent action of the muſcles of the face, yet this is rather inconſiderable when compared with what, according to his obſervations, is expreſſed by the ſolid parts; for inſtance, the ſkull. The profile of the face, however, is with him the principle article, and the firſt thing he looks at. It is really ſurpriſing how acutely he judges from that, of the turn of mind, the moral character, the abilities, and many other qualities and particulars of men; not only when he has living perſons before him, but even when he has merely the contour of the face drawn from the ſhadow.

I could mention ſeveral anecdotes, of the truth of which I have no right to doubt, ſhewing his judgment over the likeneſs of perſons unknown to him, which would aſtoniſh you. On principles entirely new, reſpecting the harmony of the features, he has founded a ſort of divination, by means of which, he is able to diſcern, in the likeneſſes of men whom he has never ſeen, whether any of the features be wrong done, or whether the whole harmonizes together ſo far that the likeneſs

likeneſs may be ſuppoſed to reſemble the original. A very uſeful art for painters. But all this does not fall properly into my plan, as theſe particulars do not belong to the volume before me.

We are to be made acquainted, in this work, with many poſitive ſigns on the outſide of men which indicate particular internal qualities. Moſt of theſe ſigns will be mentioned occaſionally in the explaining of phyſiognomies. In this firſt volume, however, theſe ſigns, from the truly philoſophical and analytical plan of our author, are ſcarcely to be met with. When pronouncing a judgment over a phyſiognomy he, in this, frequently appeals to the feeling of the reader. But, in the ſucceeding volume, of which I have already ſeen ſome ſheets, I find that he is more poſitive in this point, and frequently has theſe ſigns more determined with mathematical exactneſs. It ſeems to be his plan, with each volume, to give a ſtronger foundation to his work, by demonſtrating theſe ſigns more exactly, and in a more determinate manner, till, in the laſt volume, he be able, by a ſet of undeniable truths and conſequences, to raiſe this ſcience to a height which will make it ſhine even in the following centuries.

As

As the author is to lay down certain rules, by which to judge of the phyſiognomies of men, you may eaſily gueſs, that many warnings are given to make readers cautious in their judgment. Much, indeed, according to our author, is required for a good phyſiognomer. Theſe requiſites he points out in the fifteenth fragment, which is intitled The Phyſiognomer, and which contains many excellent reflexions. A would-be phyſiognomer, he ſays, with a ſhallow head and a bad heart, is one of the moſt contemptible and noxious creatures upon earth. In concluding that ſection, he adds, "No one, certainly, is able to diſcern the look of magnanimity, or the countenance of an exalted ſoul, but he who is magnanimous himſelf, who thinks nobly, and who is diſpoſed to act generouſly."

The author propoſes it as a queſtion, whether phyſiognomical knowledge will not be rather noxious to ſociety than uſeful? And after having fully entered into the ſubject, after having ſhewn that no ſcience properly, and in general, can be ſtiled noxious, he concludes thus: "The ſureſt, but moſt inconſiderable advantage, that may be reaped from phyſiognomy, is for painters, whoſe art, as far as it meddles with human figures, is worth

worth nothing, if it be not founded upon phyſiognomy; a more noble advantage which it yields, is that of guiding and correcting the human heart."

Another paſſage, which has ſome relation to this, I ſhall here add. "The internal goodneſs of a man, is determined by the pleaſure which the beauty, liberty, and perfections of his fellow creatures, cauſe to him. If you want to know whether your heart be wicked, aſk yourſelf. Does it give you more pleaſure to find fault with others, than to ſee perfections? To be acquainted with one beauty and perfection, is of infinitely more conſequence and uſe than to know millions of faults. Every ſort of perfection is but a ſingle one; deviations from it are innumerable. Nothing is more apt to beſtow humanity upon the mind, than the diſcovery of the beauty and perfection of human nature. It is much better to ſay little that is uſeful, than to ſay a great deal that could hurt. In this world, Good God, who can make known imperfections, without being an author of miſchief."

What Mr Lavater advances in theſe paſſages, is very remarkable, becauſe he was apparently guided by theſe maxims when he wrote this work.

work. Being always occupied with reſearches after good qualities, and their ſigns, he does not much mind the bad ones; and eſpecially, if, in the faces of real perſons, he finds what he does not like, he never meddles with it. He has inſerted, it is true, ſome engravings from Hogarth, to give a view of the phyſiognomies of ſome of the moſt abject mortals in carricature. Carricatures, he ſomewhere beautifully obſerves, are to the phyſiognomer what microſcopes are for phyſical objects; and I find in another engraving, with the carricatures of ſome notorious rogues, that our author, who is a republican Swiſs, and who once, when a young man, brought an unjuſt country magiſtrate to puniſhment, has the head of honeſt John W——s, Eſq; among them, although not named. But, having introduced objects of horror, with a ſigh at the corruption of which human nature is capable, he haſtens to leave them for more pleaſing objects. I ſhall only add here a few expreſſions which he uſes in giving an explanation of the plate which I have mentioned above. "Contorſion, perverſity, malignity, miſchievouſneſs, can in no face appear more lively than here. What renders theſe faces ghaſtly? Diſharmony, wry features, duplicity!

city! And what cauſes it? Baſeneſs and falſeneſs.

"Such faces are never formed by nature. Bad education, example, and cuſtom, kindle the tinder of a wanton heart. Theſe diſtort the face of a man into the maſk of a ſatan.

"Such faces as theſe here, are food for ravens; they are branded by their phyſiognomy. It is impoſſible that a man, as long as he is able to lift up his eyes to God, ſhould look like one of them.

"Nothing diſfigures men more than vice; nothing adds more to their beauty than virtue." Theſe topics are the theme and the ſpirit of this work. If theſe aſſertions be not acknowledged, our author obſerves, he had better write not a ſingle line on phyſiognomical matters.

Having thus ſtated here, as in many other places, that moral perfections are always producing, in ſome reſpect, corporeal beauty, he introduces an objection made to the culture of phyſiognomy, "that it was to be feared it might render men vain, by exciting a deſire to become virtuous, in order to become handſome." All this he anſwers in the following manner. "Let it be admitted, that, beſides

the

the noble deſire of improving in honeſty, the wiſh of pleaſing the virtuous, bears its part in correcting men, that it ſerves as a ſupport, if you pleaſe, like crutches, for virtue. Let a man be happy by finding, that his countenance acquires ſome beauty as his moral parts mend. He will ſoon remember, if he be a thinking man, that virtue, produced by vanity, is not pure; that vanity ever wears the ſtamp of lowlineſs; and, that the heavenly beauty of virtue cannot be acquired, but by virtue itſelf, which deſtroys vanity."

I ſhall endeavour to give you, at leaſt, one inſtance of our author's manner of pointing out the particularities of a phyſiognomy. I find it, however, exceedingly difficult for me to tranſlate it, as I am not ſufficiently maſter of the Engliſh language. I am ſorry, therefore, that you will loſe much by it; and you will loſe ſtill more by not having the engraving before you. Let us take, for example, a head of Homer, which was found a little mutilated at Conſtantinople. I do not believe that the reflections which the author makes on this phyſiognomy, are preferable to many others; on the contrary, I think that he proceeds leſs philoſophically than in many others, and that he appeals rather too frequently to the feeling

feeling of the reader. As the object, however, is generally intereſting, and as the buſt may perhaps be known to you, I have ſelected it as preferable to any other.

"This is a good fatherly face, full of good-nature and heartineſs! This front,—compare it with that ſearching, diſentangling power which vaults the front of Moſes * Mendetrohn,—is that of a beholder, not of a ſcrutineer. The noſe is that of a man of natural fine feeling; neither that of a refined ſweetly tender, nor of an uncultivated one; there is meekneſs and prudence in the paſſing over of the noſe into the lip. Suppoſe I came uninformed before this likeneſs, I ſhould ſay, This man does not ſee, does not hear, never aſks, never ſtruggles, is not operative. The centre of the ſenſes in this head is within the upper flattly vaulted cavity of the front, the ſeat of memory. Never were theſe eye-brows preſſed down in order to penetrate proportions, and to ſeparate them from their forms. Here all ſorts of life dwell chearfully together.

* Referring to the likeneſs of a learned Jew at Berlin, who is, without doubt, one of the moſt penetrating, clear-ſighted, and perſpicuouſly writing philoſophers now alive.

gether. It is Homer! This is the ſkull in which monſtrous gods and heroes had as much room as in the boundleſs heaven, and the ſpacious earth. This is Olympus, ſupported by the freely elevated noſe, as by an Atlas, which ſpreads over the whole countenance firmneſs and calmneſs. The blind retracted eye, with a turn to the inward, ſhews how that internal life is ſtrained which finiſhes the father of poets. On theſe cheeks, fatigued by conſtantly ſpeaking, are the beaten tracks on which gods and heroes deſcended to mortals. The wilful mouth, which is but the gate of theſe apparitions, ſeems to babble like that of a child, and has all the *naivité* of primeval innocence."

I could ſay much more of this work; but, as it would here be impoſſible to give a full account of a book which is ſo rich of contents, ſo curious and original throughout, I ſhall not ſwell my letter any more. This is not a work which can be abridged; it ought to be read.

I cannot, however, conclude, without expreſſing my higheſt eſteem for the author. His regard for truth and virtue, which is clearly to be ſeen in every line of this work, muſt render him reſpectable to every reader. And his earneſt

endeavours to contribute to the good of mankind, ſpringing from a heart overflowing with philanthropy, muſt make him amiable to the better ſort. Even thoſe who may ſuppoſe that this author will be diſappointed in his main end, cannot, however, deny him the great merit, both of having, in a harmleſs way, contributed to the amuſement of the public, and of being at the ſame time a moral writer of the firſt claſs.

II.

Experiments on Animal Fluids in an exhauſted Receiver. By D. Darwin, M. D. *of Litchfield.* Vid. *Philoſophical Tranſactions*, Vol. LXIV. Part II. 4to. *London.*

ALTHOUGH that doctrine, which ſuppoſes a particular ſet of veſſels in the ſyſtem to be fitted for the circulation of air, has long been exploded, yet many modern theoriſts have contended, that there exiſts in the blood-veſſels an elaſtic fluid; and, on this ſuppoſition, they have accounted for lunar and equinoctial diſeaſes from variations in the preſſure of the atmoſpheric air.

To

To determine whether ſuch a fluid does, or does not exiſt, is the ſubject of the following experiments.

In favour of the exiſtence of ſuch a fluid, the firſt experiment which our author mentions, ſeems to afford ſtrong proof. About four ounces of blood, drawn from the arm, were immediately put into the receiver of an air-pump. While the air was gradually exhauſted, the blood began to ſwell, and to riſe in bubbles, till it occupied above ten times its original ſpace. But, however plauſible this argument might appear, the opinion was fully overturned by the following trials.

Part of the jugular vein of a ſheep, full of blood, was included between two tight ligatures, and cut out while the animal was yet alive. It was immediately put into a glaſs of warm water, and placed in the receiver of an air-pump. It ſunk at firſt to the bottom of the water, and did not riſe again, although the air was carefully exhauſted. After this, it was wiped dry, and laid on the braſs floor of the receiver. The air was again exhauſted, but there was not the leaſt viſible expanſion of the vein or its contents.

A ligature was then put round the gall duct of the ſame animal; and the gall bladder, with the bile in it, being taken out and put into water, it ſunk. In this ſituation, it was placed in the exhauſted receiver of an air-pump. It was afterwards wiped dry, and laid on the braſs plate at its bottom, as in the former experiment. But, in neither caſe, even on the greateſt exhauſtion, did it ſhew the leaſt alteration of its bulk.

The urinary bladder, containing about two or three ounces of fluid, was treated in the ſame manner. Although it at firſt ſunk in warm water, yet, upon exhauſting the receiver, many ſilver-like globules appeared on the ſurface of it; and it ſoon ſhewed manifeſt ſigns of expanſion riſing to the ſurface of the water. When it was wiped dry, and laid on the floor of the receiver, the reſult was, that its expanſion and contraction were perceptible even to the naked eye.

Some months after theſe experiments were firſt made, they were again repeated in the following manner. Part of the vena cava of a ſwine, full of blood, was immediately after its death included between two ligatures. This part, which was about an inch and a half long, and conjectured to hold about an ounce of blood, was

was immediately immerſed in warm water, and put into the receiver of an air-pump. Although the air was by turns exhauſted, and again admitted into the receiver ſeveral times, yet there was no appearance of any enlargement of the vein, or of any tendency to aſcend in the water. The urinary bladder was treated in the ſame manner, and here alſo, no change in appearance took place.

The gall-bladder, however, which was tried at this time, although the biliary duct was tied before it was taken out of the body, roſe in water, and had air bubbles appearing on its ſides, like globules of quick-ſilver, as our author had formerly found to happen to the urinary bladder.

But, in both theſe caſes, our author aſcribed the change of appearance to ſome adhering cellular membrane, into the cells of which ſome of the air had inſinuated itſelf at the time of cutting, as it does in tearing off the ſkins of animals recently killed. Before mentioning our author's concluſions, it may be proper to obſerve, that, in all theſe experiments, the water was heated to about an hundred degrees of Fahrenheit's ſcale, leſt a greater degree of heat might have raiſed

an elaſtic vapour from theſe fluids, which did not naturally exiſt in the living animal.

From theſe facts Dr Darwin deduces ſeveral concluſions. He infers, that, as a great change is produced in the blood, in conſequence of its receiving in its paſſage from the arm a mixture of atmoſpheric air, any experiments afterwards made for aſcertaining its ſenſible or chemical properties muſt be highly erroneous. On this principle, he accounts for a greater quantity of froth being obſerved when blood drawn in the common manner is put under an exhauſted receiver, than when it is ſubjected to a vacuum from being drawn off by cupping; although, in this caſe, the vacuum be in as great a degree as in the former. From the facts that have been mentioned, Dr Darwin farther thinks it probable, that animal bodies can bear, without inconvenience, much greater variations in the preſſure of the atmoſphere, than any of thoſe to which it is naturally ſubjected. And he concludes, that thoſe ſpittings of blood which have occurred in aſcending high mountains, were not the effect of the preſſure of the atmoſphere being diminiſhed, but were either owing to violent exertion, or ſome other accidental cauſe. This opinion is, he thinks, confirmed from

from what Dr Halley obſerved, when, from deſcending in the diving bell, he was ſubjected to a preſſure equal to that of many atmoſpheres. He felt no other inconvenience, but a diſagreeable ſenſation like ſomething burſting in his ears. This Dr Darwin aſcribes to the air contained in the tympanum, veſtibulum, cochlea, and ſemicircular canals having forced its way into the Euſtachian tubes, or external ear. From this conjecture he was led to imagine, that, when the immediate cauſe of deafneſs was owing to the exceſs or defect of external air, the application of a cupping-glaſs, fitted with a ſyringe for exhauſting it, might be of uſe. He accordingly tried this experiment with three different perſons who were very bad of hearing. On working the ſyringe, the external ear ſwelled and became red, and at length, when the patient complained of pain in the internal ear, the air was re-admitted. Of theſe three patients, one heard conſiderably better immediately after the operation, and continued to do ſo afterwards. The others received neither benefit nor diſſervice.

III.

Account of a Woman enjoying the Uſe of her right Arm, after the Head of the Os Humeri *was cut away. By* James Bent *Surgeon at Newcaſtle.* Vid. *Philoſophical Tranſactions*, Vol. LXIV. Part. 2. 4to, *London.*

THE ſuppoſition that the head of a bone, with its ligaments, can be regenerated, muſt unqueſtionably appear marvelous, and may prevent due attention being paid to thoſe operations which propoſe the removal of it. Hence every fact which ſerves to ſhow that ſuch an operation is not only practicable, but adviſeable, merits a careful conſideration. With ſuch a fact we are preſented in the hiſtory before us.

It is here proper to obſerve, that the preſent is not the only inſtance in which this operation has been ſaid to be performed. Mr White of Manchester, in his ſurgical caſes, publiſhed ſome years ago, aſſerts that he ſawed off the upper head of the os humeri, and that his patient afterwards enjoyed the entire uſe of the joint. Mr Bent, however, the author of the preſent obſervation is, from

from ſeveral circumſtances, inclined to believe, that, in Mr White's caſe, a part of the body only of the humerus was removed, which had been ſeparated from its epiphiſis by a caries, while, at the ſame time, the joint, with its capſular ligament, remained in a ſound ſtate. But, in the preſent inſtance, he thinks there can be no doubt that the head of the bone was actually removed.

The patient on whom this operation was performed, was the daughter of a farmer, who had been afflicted near three years with an abſcefs in the joint of her right ſhoulder. Into this abſcefs there were three apertures, two near the middle and lower edge of the clavicle, and a third near the inſertion of the pectoral muſcle into the humerus. By introducing two probes, the one at the upper, the other at the lower orifice, they eaſily met in the joint; and Mr Bent could diſtinctly perceive the head of the humerus to be carious. In this ſituation, there was no alternative, but either to amputate the arm, or cut off the head of the bone; and he determined upon the latter of theſe. He accordingly began an inciſion from the upper orifice, near the clavicle, and continued it over the joint to the inſertion of the pectoral muſcle. But as by this, he was not able to get readily

readily at the head of the bone, he ſeparated a part of the deltoid muſcle from its inſertion into the clavicle, and likewiſe a little of its inſertion into the humerus. He then found the capſular ligament ſo thickened, as to keep the head of the bone cloſe to its ſocket, and to prevent it from riſing, upon preſſing the elbow backwards. He was therefore obliged to ſeparate it quite round. After this, he brought the head of the bone over the pectoral muſcle, and cut off all that had been deprived of perioſtium. During this operation, Mr Bent had no occaſion to take up any artery, the pain which his patient endured was not very conſiderable, no exfoliation ſucceeded, and ſhe recovered by the common treatment, without any bad ſymptom. After the cicatrix was compleatly heal, ſhe enjoyed the perfect uſe of her forearm, ſhe could raiſe her elbow about five or ſix inches from her ſide, and perform as well as ever, any work which did not require the elbow to be more raiſed; the upper end of the humerus playing about an inch below the point of the ſcapula.

IV.

IV.

Continuation of an experimental Inquiry concerning the Nature of the mineral elaſtic Spirit or Air contained in the Pouhon Water, and other Acidulae. *By* William Brownrigg, M. D. F. R. S. Vid. *Philoſophical Tranſactions*, Vol. LXIV. Part. II. 4to. *London.*

IT is now ſeveral years ſince Dr Brownrigg publiſhed, in the Philoſophical Tranſactions, an inquiry concerning the air contained in Spa water. With his obſervations on this ſubject, we may ſuppoſe moſt of our intelligent readers to be acquainted. He then promiſed to favour the public with farther experiments, intended to explain the mode of union that exiſts between the air of thoſe waters and the other principles of which they are compoſed; together with the relation which that elaſtic fluid bears to common air, and to various other bodies. With his obſervations on this ſubject we are now preſented in the eſſay before us.

The great propoſition which he undertakes to prove is, that the ferruginous and abſorbent earths

earths contained in the Pouhon water are kept diſſolved in it by means of the mephitic air, to which theſe earths are united. From the experiments which he formerly publiſhed, it appeared, that mephitic air is not detained in Pouhon water by the preſſure of the atmoſphere or any external force, but that it is equally mixed with the watery element, and the other ingredients in a ſtate of ſolution, and is attached to the water by a force ſufficient to keep all theſe ingredients united in one uniform compound. He found, however, that this force could be removed by ſome external cauſes, that the air could be expelled by certain degrees of heat, and that, when this happens, the water undergoes a decompoſition, letting fall its other ingredients in proportion to the quantity of air expelled. He has farther found, that the oppoſite extreme of cold will produce the ſame effect of decompounding the Pouhon water, when its aereal principle is expelled by means of congelation.

Having poured ſome of this water into tin veſſels, placed in a freezing mixture of ſea ſalt and ſnow, he found, that as ſoon as the water began to ſhoot into ice, minute bubbles of air inceſſantly roſe from it, till all the water was congealed. The ice

ice was very white, being every where interſperſed with minute bubbles of air, by which it was conſiderably increaſed in bulk, and roſe on its ſurface into a convex form. When this ice was thawed, the water was white and turbid, and let fall a conſiderable portion of its metallic and abſorbent earths. By a ſecond congelation it was entirely deprived of its air, and upon thawing, it was deprived of the remaining earths.

In theſe decompoſitions of Pouhon water both by heat and cold, no volatile ſpirit, either acid or ſulphureous, nor any other ſubtle matter, has been found to fly off from it, excepting mephitic air. Hence Dr Brownrigg thinks it appears, that this air is the medium by which the metalline and abſorbent earths contained in the Pouhon water are kept diſſolved; and, on the other hand, that theſe earths are the medium by which this air is more firmly united to the watery element. And he concludes, that, by its ſolution in water, and its union with thoſe earthy ſubſtances, from a very volatile and elaſtic body, it is reduced to a fixed ſtate.

Our author is of opinion, that the mephitic air and martial earth contained in the Pouhon waters ſtrongly attract each other, and, uniting together, form a concrete ſoluble in water. This concrete

may

may be eſteemed a ſaline body of the neutral kind, of which the mephitic air conſtitutes the ſpiritous ſolvent, and the martial earth its baſe. The mephitic air, he obſerves, is poſſeſſed of all thoſe properties by which chemiſts have diſtinguiſhed pure ſaline bodies, and which, in union with other bodies, form more compound ſalts. This aerial principle, like pure acid ſpirits, is ſoluble in water, and imparts to it its peculiar ſharp and acidulous ſavour. In combination with metalline and abſorbent earths, it forms concretes ſoluble in water, and giving to the water a peculiar taſte, reſulting in part from the ſpiritous principle, and in part from the earth with which it is combined. This air, therefore, may, he thinks, be juſtly ſtiled a mineral elaſtic ſpirit of a ſaline nature, ſufficiently diſtinguiſhed by its rarity and by its ſaline properties. And he concludes, that a claſs of ſaline bodies are detected, which are compoſed of various earthy baſes united to a volatile aerial ſpirit, and differing from each other according to the nature of the baſe.

The agreement of theſe ſaline concretes with neutral ſalts, farther appears from their decompoſition, which is effected by the ſame means ſerving to decompound other natural ſalts. The aerial

aerial ſpirit of theſe ſaline concretes is forced by fire, from its union with the earthy baſe, in the ſame manner as the acid ſpirit of other neutral ſalts is expelled by fire from the more fixed principles which enter the compoſition of theſe ſalts. The ſaline concretes formed with this aerial ſolvent, are decompounded by the addition of ſtronger acids, in the ſame manner as other neutral ſalts. And, *laſtly*, they are decompounded not only by ſtronger acids, but alſo by alkalies, whether fixed or volatile. In the decompoſitions, by means of alkalies, no efferveſcence or diſcharge of air bubbles takes place. For here the air is abſorbed by the alkali, and not expelled from the water as in the decompoſition of theſe waters by ſtronger acids.

Theſe obſervations, our author thinks, ſhow an exact agreement between the neutral ſalts and thoſe ſaline concretes, which are formed of mephitic air united to an earthy baſe in the acidulae. He obſerves, however, that the concretes exiſting in the Pouhon water, although evidently of the neutral kind, have not hitherto been obtained in a ſolid form. This, he imagines, may in ſome meaſure be owing to the great volatility of their ſpiritous principle; but he aſcribes it chiefly to the

their being ſubjected to decompoſition, from the precipitation of their earthy baſe, by means of common air, during the evaporation of the water in which they are diſſolved.

Although the mephitic air of the acidulae be ſoluble in water, imparting to it a briſk pungent taſte, which has generally been ſtiled ſubacid; and although it produces many effects ſimilar to thoſe of acid ſpirits, yet it differs from all acids found in a liquid form, in its rare texture, and in its elaſtic quality. Beſides this, it does not ſtrike a red colour with ſyrup of violets, or with other blue tinctures of vegetables, which has uſually been eſteemed a teſt of the preſence of acid. How far, therefore, it may juſtly merit the title of an acid, our author leaves to the determination of others. He thinks, however, there can be no doubt, that mephitic air has appeared in this light to many philoſophers; and he conſiders it to be the ſame with the acidum vagum ſodinarum of Boerhaave, with the acidum centrale perpetuum inexhaurabile of Becher, with the ſpiritus ſulphureus aereo-aetherio-elaſticus of Hoffman, and with the ſal embrionatus, and ſal eſurinus of Helmont.

From

From conſidering the great ſubtlety of this principle, its power of diſſolving earthy ſubſtances, its property of readily uniting with water, and thus pervading the minute veſſels of the animal frame, Dr Brownrigg imagines that we may form ſome judgment of its great efficacy as a deobſtruent and ſolvent in many diſeaſes of the human body, ariſing from preternatural concretions and obſtructions. And, from attending to the great antiſeptic powers which it poſſeſſes in common with acids, we may, in ſome meaſure, account for thoſe extraordinary effects which it is found to produce in the cure of many obſtinate diſeaſes.

V.

Of Torpedos found on the Coaſt of England, in a Letter from John Walſh, *Eſq*; F. R. S. *to* Thomas Pennant, *Eſq*; F. R. S. Vid. *Philoſophical Tranſactions*, Vol. LXIV. P. 2d. 4to. *London.*

IT has long been the opinion of naturaliſts, that the Torpedo or Electric Ray, a fiſh which has of late been the ſource of much phi-

loſophical inquiry, is not a native of the Britiſh ſhore, but to be found only in warmer climates. But the ingenious writer of the preſent letter, who is already well known to the learned world, by his obſervations on this animal, has here given ſufficient evidence, that the opinion is a miſtaken one.

In conſequence of inquiries which he ſet on foot, he received in London two torpedos taken in Torbay, the one in the beginning of Auguſt, the other in the beginning of November. The firſt of theſe Mr Walſh himſelf had not an opportunity of ſeeing; but it was examined by Mr John Hunter, and the electrical organs ſucceſsfully injected. The ſecond he examined particularly before it was diſſected. He found it to weigh fifty-three pounds averdupois, and to meaſure four feet in length, two feet and a half in its extreme breadth, and about four inches and a half in its extreme thickneſs. Thus this Britiſh torpedo was near three times the ſize of the largeſt which are caught in the Mediterranean. Its electric organs were proportioned to its ſize in other reſpects, each meaſuring about fifteen inches in extreme length, and eight in extreme breadth.

The

The electric organs of this laſt torpedo alſo were injected by Mr Hunter; but, from the burſting of the artery, he was ſomewhat diſappointed. He determined, however, the number of columns in one organ to amount to 1182, and he fully confirmed the obſervation he had formerly made, that their numerous horizontal partitions were very vaſcular.

Mr Walſh obſerves, that the reſt of this torpedo being dreſſed, was brought to table, and that ſome of his friends ſuffered a little from their curioſity in taſting it. He is, however, of opinion, that, although it has been forbid to be ſold in the market of Venice by the prefect of health, yet it is not to be deemed unwholeſome food. The electrical organs, which make about one half of the animal, are an inſipid mucilage; but its muſcular part is as palatable as the fleſh of the other rays. They are ſold, he obſerves, in the markets of France; but thoſe which are old or overgrown, are in little requeſt.

From the obſervations of Ariſtotle, Lorenzini, and Mr Saunier of la Rochelle, our author concludes, that the torpedo brings forth its young twice in the year, and that this principally takes place about the vernal and autumnal equinoxes.

From ſome circumſtances, however, he is led to think, that there may likewiſe be a production about midſummer; and, from the remarkable inſtances of ſuperfoetation which he has ſometimes obſerved, he farther infers, that, agreeably to Ariſtotle's information concerning the cartilaginous fiſh in general, the torpedo goes near ſix months with young.

From ſome information which our author obtained by means of his learned friend Sir George Baker, reſpecting a torpedo which was caught at Mounts Bay in Cornwall, it appears, that it does take the hook. He concludes, therefore, that thoſe beautiful poetical deſcriptions of the capture of the torpedo, which by many have been thought fabulous, are in reality founded. He remarks, however, that, to catch with the greateſt ſucceſs the torpedo, as well as other flat fiſh, which keep near the ground, the trawl or drag-net muſt be uſed.

The torpedo, Mr Walſh obſerves, is found on the coaſt of Ireland, as well as of England. Where the fiſhery, indeed, was wholly carried on by the hook and line, the fiſhermen were entire ſtrangers to the torpedo; but at Ring, a ſmall fiſhing village where pole-trawling is practiſed,

liſed, they are acquainted with it. They told him, that they ſometimes caught one or two in a year, ſometimes none in two or three years. They had taken two that year, and one the preceding year, which were, at a medium, about eighteen inches long and fourteen broad, and were caught a league off the ſhore.

That the torpedo may become the ſubject of experiment, it is neceſſary not only to know where it is to be found, but how it can beſt be preſerved alive. Mr Walſh concludes the preſent letter with ſome obſervations on this ſubject. He obſerves, that the electric ray is ſo far amphibious, as to exiſt in air for the ſpace of twenty-four hours. When kept in freſh water it ſurvives not much longer. But, as the beſt method of preſerving it, he propoſes a well-boat, kept in ſalt water, and not put into much motion. In ſuch a pen, he has preſerved them for ſeveral days, and always without food. In confinement, they neglect all kinds of prey; but, from their quiet nature, he thinks it would be eaſy to force them, if neceſſary, to ſwallow food.

Thus, then, it appears, that Great Britain has a claim to the torpedo, or electric ray of the

broad marine ſort, whoſe influence has been ſaid to ſubdue obſtinate headachs, and even the gout itſelf. For medical purpoſes, however, this animal will not now be employed, as the Leyden phial contains all its magic powers.

VI.

Remede eprouvé pour guerir radicalement le Cancer occulte et manifeſte ou ulcéré. Par Meſſire G. R. Le Febure *de St Ild***, Ecuyer Docteur en Médecine.* 8vo. Paris.

TO this treatiſe Mr Le Febure has prefixed as a motto, the following quotation from Celſus: Melius eſt anceps eligere remedium quam nullum: And he introduces his ſubject by preſenting us with a few obſervations on this ſentiment. He obſerves, that, by the word *anceps*, he does not mean a remedy, the effects of which are doubtful. He underſtands it only to mean, that it is better to employ a medicine, the good effects of which have not been confirmed by general experience, than to uſe none at all.

He

He declines entering into any diſquiſition concerning the cauſes of cancer, the ſeat of it, or the nature of the cancerous virus. He informs us, however, reſpecting the laſt of theſe particulars, that in one inſtance he found it alkaleſcent, and in another aceſcent; and he regrets, that, from the want of ſufficient ſupply of matter, he was unable to carry his reſearches farther. He found, contrary to the aſſertions of the author of the Dictionnaire Economique, that the cancerous virus, when given to dogs, had no effect in producing the rabies canina; and he promiſes a more minute detail of his experiments on this ſubject, in ſome obſervations on hydrophobia, which he is at preſent preparing for the preſs.

Having premiſed a few introductory remarks reſpecting the diffidence and circumſpection with which new medicines ought to be propoſed or adopted, intended to inſpire a confidence with regard to what he is afterwards to advance, he informs us, that arſenic, taken internally, is the remedy which he has diſcovered to be effectual in the cure of cancer. As this practice will naturally ſurpriſe moſt readers, he juſtifies himſelf from the charge of vain empyriciſm, by enumerating inſtances where phyſicians have had re-

courſe to ſubſtances equally dangerous, and even to arſenic itſelf, with ſingular advantage.

Mr Le Febure next proceeds to mention the circumſtances to be attended to in the adminiſtration of arſenic. He orders it to be given according to the following receipt. Take four grains of arſenic, of a clear white ſhining appearance, and in ſmall cryſtals; diſſolve it in a pint of diſtilled water; let the patient take a table ſpoonful of this ſolution, with an equal quantity of milk, and half an ounce of ſyrup of poppies, every morning, faſting, and taking care to taſte nothing for an hour after.

This courſe muſt be continued for eight days, after which, a doſe is to be taken in the ſame manner twice every day, the firſt in the morning, the ſecond towards eight at night. At the end of a fortnight, three doſes are to be given in a day, the third being taken about mid-day.

In this manner, women of weakly conſtitutions may continue till a cure be compleated. But, with an adult of a good conſtitution, the doſe may be augmented, by degrees, every eight days, till he take ſix table ſpoonfuls of the ſolution

tion every day; two table ſpoonfuls being taken for each doſe, with as much milk, and half an an ounce of the ſyrup of poppies. For children, tea-ſpoons muſt be uſed, and the doſe ſhould, on no account, exceed three of theſe, with a proportional quantity of the ſyrup of poppies.

But, beſides that the ſolution of arſenic is thus to be increaſed to a certain height, in point of quantity, the ſtrength is alſo to be augmented. Six grains of arſenic may be diſſolved in the ſecond bottle of the ſolution, and eight in the third. But, beyond this, our author thinks it unadviſeable to proceed. He has, in general, found ſix bottles of the ſolution ſufficient for the cure of an open cancer. In one caſe, however, eight were neceſſary.

He informs us, that this remedy, taken with the above precautions, never occaſions any unlucky accident; and is not diſagreeable to the taſte. It does not act in any certain manner upon the ſecretions or excretions. Some, indeed, diſcharge their urine more freely than uſual, with ſome the belly is more looſe, and with others the perſpiration is more copious. But theſe effects are neither general nor conſtant.

A purgative compounded of manna, rhubarb, and ſal ſeignette, is to be given every eight or twelve days. Whey, with twelve grains of nitre to the bottle, or a weak decoction of the root of althea, with an equal quantity of nitre, is to be uſed for common drink. The belly is to be kept open by injections of whey, bran water, or pure water, with the addition, if neceſſary, of emolient herbs or honey.

With reſpect to regimen, it is neceſſary to abſtain from wine and fermented liquors. Broth, made with a little beef, veal, or chicken, are proper. Broiled, roaſted, or boiled meat, ought to be taken in ſmall quantity. Spinage, lettuce, ſuccory, or ſorrel, may be given with advantage. Ripe fruit is not to be diſcharged. Rice, cream, and milk in different forms, is a very proper part of diet.

Mr Le Febure has ſometimes been obliged to give the Peruvian bark, and to open an iſſue, when the humours were either very alkaleſcent, or in very great quantity. He even conſiders an iſſue as uſeful in every caſe. When the ulcer is cicatrized, he recommends cold or warm mineral waters, according to the circumſtances of the patient, with a view of compleating the cure;

cure; or, where theſe cannot be had, he gives artificial ones.

Beſides this treatment by internal medicines, the method of dreſſing the ulcer becomes alſo an object of attention in the cure of cancer. If the tumour be not ulcerated, he recommends, that it ſhould be waſhed with a ſolution of arſenic, having to the extent of eight grains in the pint of water; and he adviſes afterwards the application of the following cataplaſm. Take of carrot juice one pound, of ſugar of lead half an ounce, of arſenic, diſſolved in diſtilled vinegar, half an ounce, of liquid laudanum, a dram and a half; form the whole into a maſs of proper conſiſtence with as much powder of hemlock as is neceſſary. With part of this cataplaſm the tumour is to be covered to a tolerable thickneſs, and the whole kept on with a diachylon plaſter.

If the cancer be of the ulcerated kind, he adviſes, that the ichorous ſeroſity be taken away at each dreſſing, by means of dry charpee. He then directs the ulcer to be fomented with the arſenical ſolution, having the chill taken off it, and having about one third of red wine added to it. If the ſore be of a very bad kind, he propoſes that the arſenic be diſſolved in a decoction

of

of bark, for fomenting the ulcer. After this, the cataplaſm mentioned above, and the plaſter are to be applied. This treatment muſt be renewed every twelve hours.

If the ulcer be ſituated in the womb, he recommends, that injections be frequently thrown up of a decoction of carrots and hemlock, having four grains of opium, and as much arſenic, diſſolved in every pint of it.

Mr Le Febure, before he concludes this treatiſe, aſſures his readers, that, in more than two hundred inſtances, he has had proofs of the efficacy of the medicine here propoſed. He does not, however, pretend, that it is infallible in every caſe. He conſiders the diſeaſe to be incurable, if, in its progreſs, a conſiderable haemorrhagy has happened, from the eroſion of large blood veſſels. Nothing alſo but a miracle could ſave thoſe who are hectic, or in the laſt ſtage of phthiſis. To judge of the efficacy of any remedy, he obſerves, that the patient with whom it is tried ſhould, at leaſt, enjoy an ordinary good conſtitution, and be free from a complication of diſeaſes. And he conſiders the exhibition of a new remedy to a patient, in ſome meaſure, breathing his laſt,

as

as ſerving no other purpoſe but to bring it into diſcredit.

VII.

Elements of the Practice of Midwifery. *By* Alexander Hamilton, *Surgeon, and Teacher of Midwifery in Edinburgh.* 8vo. *London.*

IT may perhaps be imagined, that an account of a general ſyſtem, on any particular branch of medicine, is but ill adapted to the nature of ſuch a work as ours. Such ſyſtems muſt conſiſt principally of opinions and doctrines, which, although, perhaps, they may be more diſtinctly arranged than by former writers, have yet been previouſly known, and generally received. It may, however, with truth, be affirmed, that, from the publications of ſeveral eminent men, more light has been thrown on midwifery within theſe few years paſt, than for a century preceding. Hence, an elementary view of this ſubject, accommodated to theſe recent diſcoveries, cannot be unacceptable to practitioners. As ſuch, we propoſe to preſent our readers with ſome account of the accurate and comprehenſive ſyllabus now before

before us. Paſſing over, however, in a curſory manner thoſe obſervations of this treatiſe which are generally known, the remarks now to be offered will principally reſpect the new matter which it contains.

After introducing his ſubject by a general deſcription of the foetus, pelvis, and organs of generation, the author proceeds to offer many curious obſervations on the function of generation. Many have been the theories of philoſophers with regard to this wonderful faculty of animal ſyſtems. And, although it is not to be doubted, that various particulars reſpecting it have eluded all inquiry, yet there can be no queſtion, that ſome circumſtances have of late been more certainly aſcertained, and that the progreſs both of the foetus and uterus, through the different ſtages of pregnancy, have been more diſtinctly marked than formerly. On this ſubject our author begins with ſome remarks on the menſtrual flux. After mentioning, from the moſt accurate obſervations, the time of appearance, duration, and quantity of this diſcharge, he offers ſome reflexions on the different cauſes to which it has been aſſigned. Rejecting, without any examination thoſe opinions which ſuppoſe menſtruation

to

to depend on the influence of the moon, the ferment of particular fluids, or ſuch like cauſes, he conſiders it as moſt probable that it proceeds from an univerſal or from a partial plethora. To the former, however, he brings ſeveral objections; and he aſſerts, that the idea itſelf is vague; that the exiſtence of general plethora previous to menſtruation is by no means proved; and that, even allowing it to be proved, it will not account for all the appearances. He holds it to be the lateſt and moſt probable opinon, that the menſes depend on a topical congeſtion. And he adopts this opinion on the ground on which it has lately been taught in the univerſity of Edinburgh by Doctor Cullen.

He ſets out with obſerving, that the growth of the human ſyſtem, in general, depends on an increaſe of the quantity of fluids, giving occaſion to the diſtenſion of veſſels, and thus producing a gradual evolution. This evolution he conſiders as not happening equally in every part of the body at the ſame time, but ſucceſſively in different parts, according to the ſize and denſity of the ſeveral veſſels, determined by the original ſtamina. The upper parts of the body, he obſerves, firſt acquire the natural ſize, and then the lower

lower extremities. By this conſtitution, the uterus is not conſiderably evolved till the reſt of the body be nearly arrived at its full bulk. But the veſſels of other parts, in conſequence of their diſtenſion and growth, increaſing in denſity, not only give greater reſiſtance, but determine the blood in greater quantity to parts not yet equally evolved. Upon theſe principles, there will be a period in the growth of the body, when the veſſels of the uterus will be diſtended till they are in balance with the reſt of the ſyſtem. This theory ſuppoſes the conſtitution of theſe veſſels to be ſuch, that it may proceed ſo far as to open their extremities terminating in the cavity of the uterus, ſo as to pour out blood there, or that a certain degree of diſtention may be ſufficient to irritate and increaſe the action of the veſſels, producing an haemorrhagic effort, which may force the extremities of the veſſels with the ſame effect of pouring out the blood.

In this manner, it is imagined, that the firſt appearance of a flow of blood from the uterus in women may be accounted for. It proceeds upon the ſuppoſition, that the evolution of each particular part muſt eſpecially depend upon increaſed congeſtion in its proper veſſels. But as this

this plethoric ſtate of the veſſels of the uterus produces an evacuation of blood from them, they are again put into a relaxed ſtate with reſpect to the reſt of the ſyſtem. This emptied and relaxed ſtate is ſuppoſed to give occaſion to a new congeſtion, till theſe veſſels be again brought to the degree of diſtenſion which may either force their extremities, or produce a new haemorrhagic effort, with the ſame effect as before. Thus, the menſtrual diſcharge is begun by cauſes which muſt continue to produce it at certain intervals, till particular circumſtances occaſion a conſiderable change in the conſtitution of the uterus. The return of this diſcharge at nearly the ſpace of a month, depends on a certain balance between the veſſels of the uterus and thoſe of other parts of the body. When the firſt periods are thus determined, a conſiderable increaſe or diminution of the quantity of blood in the ſyſtem will have afterwards but little effect, as increaſing or diminiſhing the quantity diſtributed to the uterus. And when this evacuation has been repeated for ſome time, at regular periods, it is ſuppoſed, that the power of habit will have a great ſhare in continuing this regularity.

In this manner, according to our author, does Dr Cullen explain the theory of menſtruation. And he is inclined to conſider this account as the moſt rational that has yet been advanced. He concludes, however, with obſerving that to him it ſeems ſtill liable to objection. What theſe objections are, however, our author has not ſaid; nor is it our buſineſs to enter into any inquiry reſpecting them. We may here, however, obſerve, that this opinion is not, perhaps, ſo generally received at the univerſity of Edinburgh as our author ſeems to imagine. Dr Monro is ſtill a ſtrenuous advocate for the ſuppoſition, that menſtruation depends on a general plethora; and Dr Duncan, while he taught the Inſtitutions of Medicine in the univerſity, was ſo little ſatisfied with either, that he ventured to propoſe a new hypotheſis on this ſubject. With a ſhort account of his opinion we ſhall probably preſent our readers in ſome future number. Mean while, it will be ſufficient to beſpeak their attention, if we obſerve, that, in a matter of ſo much doubt, it is hard to ſay, who may be the fortunate perſon, firſt to hit upon the truth.

After theſe remarks on the menſtrual flux, Mr Hamilton next offers ſome obſervations on conception.

conception. Here he reduces all the hypotheſes that have been offered on the ſubject to three heads. Some, he obſerves, have imagined, that the rudiments of the foetus are contained in the mother. Others are of opinion that they exiſt in the male. And a third ſet hold, that the foetus reſults from an union of both. To this laſt opinion, our author ſeems to be moſt inclined. For, after giving a ſhort view of the hypotheſes of Ariſtotle, Leewenhoek, and Buffon, and after remarking, that all of them, however apparently ſpecious, are equally expoſed to difficulties and objections, he obſerves, that it is certain there can be no impregnation but by the mutual concurrence of the generative faculties of both ſexes. He holds, that, by the orgaſmus venereus and the injection of the male ſeed, all the uterine appendages are put in motion, and that the Fallopian tubes become turgid and erect, ſo that their fimbriae graſp the ovaria, and ſeparate one of the ova from it. He thinks it certain, that the male ſemen is conveyed into the uterus in coition; and he reckons it alſo probable, that, by aſcending through the Fallopian tubes, it impregnates the ovum, and that the impregnated ovum is afterwards conducted by the tube into the uterus.

Having thus ſtated his opinion of conception, he concludes the phyſiological part of his elements with a very accurate deſcription of the ovum and its gradations, as well as of the gravid uterus; in all which he has been much indebted to the elegant plates of Dr Hunter.

The ſecond great diviſion of Mr Hamilton's ſubject is the pathological part of midwifery. Here he delivers an elementary view of the treatment beſt ſuited for various topical affections of the parts of generation, with ſome obſervations on the irregularities of the menſtrual flux, fluor albus, furor uterinus, ſterility, ſpurious gravidity, and falſe conception. But the principal part of his attention is beſtowed on the diſeaſes of pregnancy; and he is particularly minute on the cauſes and treatment of floodings.

He defines the maenorrhagia gravidarum "an effuſion of blood from the uterus, confined to no regular or ſtated periods, in quantity and duration various, and liable to recur on the ſlighteſt occaſions." He conſiders the immediate cauſe of this to be, in every caſe, a ſeparation of ſome portion of the placenta or chorion from the internal ſurface of the uterus. The remote cauſes, although various, may, he thinks, be reduced to

two

two heads. Such, viz. as affect the ſyſtem in general, and ſuch as affect the uterus and placenta in particular. To the firſt he refers external accidents changing the ſtate of circulation, changes in the circulation from internal cauſes, debility, and plethora; to the laſt belong direct affections of the uterus and placenta, and ſtimuli communicated to them from an affection of other parts.

For the cure of floodings, the indications which he propoſes are, to leſſen the force and velocity of the blood in general; and to promote the conſtriction of the patulous mouths of the bleeding veſſels, or the formation of coagula in their orifices. For anſwering the firſt indication, he recommends reſt, a recumbent poſture, cool air, tranquility of mind, a light diet, venaeſection, and ſometimes opiates. For the ſecond he recommends internal aſtringent medicines, but chiefly cold ſtyptic applications to the parts affected, and their neighbourhood. When, however, the deluge of blood is ſo profuſe as to threaten death, if the woman be near her time, he conſiders the emptying the uterus, by delivery, to be the only ſafe expedient both for preſerving the life of the mother and the child.

The third and laſt part of this treatiſe reſpects labours. Under this, our author delivers a ſhort and diſtinct view of the rules to be obſerved with regard to the management of labours, whether natural, difficult, or praeter-natural. And after conſidering the methods of delivery, and the uſe of inſtruments in all other caſes, he treats, *laſtly*, of the Caeſarean operation. Here he conſiders particularly all the different circumſtances which have been alledged to render this operation neceſſary. Theſe he refers to the ſix following heads. 1 Narrowneſs or bad conformation of the bones of the pelvis. 2. Imperforated vagina, or contractions in the vagina, cicatrices, tumours, or calloſities in the os uteri. 3. The paſſage of the child through the uterus, when torn. 4. Ventral conceptions. 5. Herniae of the uterus. 6. The poſition or bulk of the child. After offering ſome remarks on each of theſe, he concludes, that the abſolute impoſſibility of extracting a child through the aperture of the pelvis is, perhaps, the only circumſtance which can juſtify the performance of the Caeſarean operation on the living ſubject. He concludes, that it ought never to be had recourſe to in caſes of diſeaſes or original mal-conformation of the ſoft parts of generation,

ration, when there is no ſuſpicion of deformity of the bones.

Although, however, he conſiders this operation as having been frequently abuſed, yet he has no doubt that, in ſome caſes, it is neceſſary, and may be ſucceſsful. He remarks, indeed, that the fate of this operation in the city of Edinburgh, where it has been performed five times, is rather diſcouraging, as none of the women have had the good fortune to ſurvive it many days. Of the laſt of theſe caſes, where the operation was performed by Mr William Chalmer, and of which our author was an eye-witneſs, he gives a particular hiſtory. In this caſe, where delivery by every other means was utterly impracticable, the woman ſurvived the operation only for the ſpace of twenty-ſix hours; but the child was ſaved.

Before leaving this ſubject, he propoſes it as a query, to what cauſe the frequent want of ſucceſs in the Caeſarean operation is to be imputed? Nervous or uterine irritation from cutting, internal haemorrhage, or the extravaſation of fluids into the cavity of the abdomen, may each of them be aſſigned as the cauſe of death. He is, however, diſpoſed to think, that it is

principally to be imputed to the influence which the acceſs of air has on the irritable viſcera. This opinion, he obſerves, is much confirmed by the experiments of Dr Monro on different animals. Dr Monro has repeatedly found, that, although a large opening be made, by an inciſion into the abdomen, yet, if the wound be quickly cloſed, the animal will recover, without any bad conſequence. But, if the viſcera be expoſed for a few minutes to the air, dreadful pains come on, and convulſions, terminating in death, quickly enſue. Upon opening the abdomen after death, the whole viſcera are found to be in an inflamed ſtate, and univerſally adhering to each other. On this ground, in performing the Caeſarean operation, Mr Hamilton recommends, that the viſcera be expoſed as little as poſſible, and that the wound be covered with the utmoſt expedition.

SECT.

SECT. II.

Medical Obſervations.

I.

Singular effects from the application of Blue Vitriol, by Mr Samuel Froat Simmons, *Surgeon at Wingham in Kent.*

A Servant to a gentleman in this neighbourhood, who had received a ſlight wound, not more than half an inch long, from a knife, acroſs the back of his hand, had it ſlightly touched with blue vitriol, to remove a little fungus which appeared in the wound. The next day he complained that his hand was much ſwelled, though not very painful. It was at firſt ſuſpected, that the tendinous faſcia on the back of the hand,

hand, or perhaps the tendons themſelves, were affected, and had occaſioned theſe ſymptoms.

The fungus not being removed by the firſt application of the vitriol, which was exceedingly gentle, and merely round the edges of the wound, it was repeated, and the ſwelling ſoon increaſed. A lymphatic veſſel was felt painful, and inflamed a great way up the arm, and the patient complained of pain in the axilla. The ſymptoms were now aſcribed to the vitriol; it was diſcontinued, and the ſwelling ſoon ſubſided.

I have ſince obſerved another caſe, very much like that which I have now deſcribed; and it may perhaps occur, in perſons of particular habits, more frequently than ſeems hitherto to have been noticed. The application of the mercurius praecipitatus ruber to large ulcers, has been found ſometimes to affect the mouth; and the ſymptoms here related ſeem to have been occaſioned by an abſorption of the copper. That mineral, therefore, when united with the vitriolic acid, as in the compoſition of the blue vitriol, would ſeem to be rendered capable of producing its ſpecific effects upon the body, even when externally applied, though no ſuch effect ariſes from it, in its metallic form.

II.

II.

Violent Aſthmatic Fits, occaſioned by the effluvia of Ipecacuanha; by William Scott, M. D. *of Stamfordham, Northumberland.*

MRS S----- of Stamfordham in Northumberland, married a perſon of the medical faculty in the year 1759, being then about 26 years of age. She had been always remarkably healthy before that period, and quite free from all nervous or other complaints, except a trifling headach that uſed to affect her temples and forehead, ſometimes for a night or ſo, about the time of her menſtruation.

The firſt year or two after her marriage, ſhe enjoyed her uſual good health and ſpirits in general; but ſometimes ſhe was afflicted with a very troubleſome ſhortneſs of breathing, attended with a remarkable ſtricture about her throat and breaſt, and with a particular kind of wheezing noiſe. Theſe fits came on very ſuddenly, and without any exciting cauſe that at firſt could be aſſigned. They were often ſo violent, as to threaten immediate ſuffocation. They laſted

ſomc-

ſometimes for a ſhorter, and ſometimes for a longer time, but, in general, went off in two or three days, and commonly with a ſpitting of a tough phlegm, which ſhe ſaid had a diſagreeable metallic taſte. When theſe fits were off, ſhe enjoyed her uſual good health and ſpirits. She had children, but ſuffered as little as any woman could do, either in breeding or lying-in; and it was not obſerved that ſhe was more ſubject to thoſe fits when with child, than at other times. She was blooded, and took ſome common pectoral medicines for them; but without any benefit.

About a year and a half, or two years after her marriage, ſhe told her huſband that ſhe had obſerved theſe fits had always attacked her when any ipecacuanha was powdered in his ſhop, and that ſhe was certain the efflúvia of that medicine immediately brought them on. This was looked on at firſt as a fancy, and little regard paid to it for ſome time. However, frequently after this, when any of that medicine was powdering or putting up, ſhe uſed immediately to call out, perhaps from a different room, that ſhe found the ipecacuanha, and that they would ſee her immediately affected by it. This I and ſeveral others ſaw frequently happen, as ſhe had ſaid; ſo that

we

we were at laſt convinced, to a demonſtration, that the effluvia of the medicine, ſome how or other, ſo affected her nerves, as to bring on a very great and remarkable degree of ſpaſm, all about her throat and breaſt.

Having thus had ſeveral repeated proofs of the effects the medicine had upon her, great precaution was therefore taken for ſeveral years, never to pound any of it, but to purchaſe it powdered; and alſo care was taken, when weighing or putting any of it up, to ſend her out of the way, or to ſome diſtant part of the houſe. By theſe means, ſhe was kept pretty clear of it for ſeven or eight years together; during which time ſhe enjoyed perfect good health.

Betwixt nine and ten o'clock in the evening June 3d 1775, her huſband happening to have got a quantity of the pulv. ipecacuanha home, without conſidering, opened it out, and put it into a bottle: His wife was not far off at the time, and then in perfect health. Almoſt before it was got quite put into the bottle, ſhe called out that ſhe felt the ipecacuanha affect her throat, on which ſhe was immediately ſeized with a ſtricture upon her breaſt, and a difficulty of breathing. She was adviſed to walk out into the air, to try if that

that would put it off, but it had little or no effect; ſhe went to bed ſome little time afterwards, was exceedingly ill all night, and betwixt two and three o'clock next morning I ſaw her, when ſhe was gaſping for breath at a window, was as pale as death, her pulſe ſcarce to be felt, and, in ſhort, ſeemed evidently to be in the utmoſt immediate danger of ſuffocation. She had ſeven or eight ounces of blood taken from her arm; her feet put into warm water; an anodyne draught, with ſeven or eight drops of laudanum, given her; and ſhe took frequently a table ſpoonful of oil of almonds. None of theſe ſeemed to have any effect, and ſhe continued much in the ſame way, with few or no intervals of eaſe, till about nine o'clock that morning; when, being in a manner almoſt exhauſted, ſhe fell into a kind of diſturbed ſleep, the difficulty of breathing, with a wheezing noiſe, ſtill continuing but little abated. She ſlept ſome little time, and got out of bed again about eleven o'clock that forenoon, her breathing being ſtill very difficult, and her eyes looked red and a little inflamed. After ſhe got up, ſhe became eaſier towards the afternoon, and it was then ſuppoſed it would go off. Dr Brown, an eminent phyſician of Newcaſtle upon Tyne, happening

happening to be in the neighbourhood, called upon Mrs S.; and being told what had happened, ſaid. he had known a caſe pretty much ſimilar from the ſame cauſe; and hoped, as ſhe then ſeemed better, it would ſoon go off. He recommended to her riding out as ſoon as ſhe was able, and to be kept open. Towards bed-time the ſame evening, the difficulty of breathing returned, and ſhe was again exceedingly ill all night; had flannel cloths wrung out of warm water applied to her feet, breaſt, and throat, with little or no advantage; was blooded again about ſeven o'clock next morning, and had alſo a bliſter applied to the back part of her neck; ſtill continuing now and then a ſpoonful of the oil of almonds. She again fell upon ſome ſleep about nine in the morning, and continued in bed till betwixt eleven and twelve; ſhe got up, and was again a little eaſier during the day, but at night was as bad as ever. The ſame ſcene was continued for eight days and nights ſucceſſively; that is, ſhe was generally a little eaſier from about eleven o'clock in the forenoon, although ſtill far from well, till towards ten or eleven o'clock at night, when the ſhortneſs of breathing always returned very violently. However, after eight days, ſhe began

began to get ſome better reſt at night; the aſthmatic fits were neither ſo long nor ſo violent; and, about fourteen days from the accident, they were almoſt entirely gone off. Although ſhe is now in very good health, ſhe has not yet quite recovered her uſual fleſh, ſtrength, and colour. Beſides the above mentioned medicines, ſhe took at times, during the firſt eight days, ſmall quantities of an emulſion of ſpermaceti, lac. ammoniacum, and ſucc. liquorit.; had a doſe of cooling phyſic; rode and walked out a little ſometimes; had a few anodyne draughts, with ſeven or eight drops of laudanum; but it could not be obſerved that ſhe got any benefit from any of them, except that ſhe ſometimes thought the oil of almonds gave her a little eaſe. She had a ſhow of the menſes four or five days after the accident, although it was then only about the middle of the uſual period; ſhe coughed up at times ſome ſmall quantities of blood, and had alſo ſome mixed with her ſtools and urine.

The reaſon why the laudanum, the moſt effectual and univerſal antiſpaſmodic, was uſed in ſuch ſmall quantities, was, that it was known before, that ſhe could never bear above eight or nine drops of it, as the common doſe uſed to affect her

her with violent ſickneſs at ſtomach, giddineſs, and pain in her head, to ſo great a degree, that, for ſome years paſt, ſhe neither would take, nor durſt her huſband adminiſter, a larger doſe to her. At the time the above accident happened, ſhe was not with child, nor had ſhe had any for ſome years before,

The above effects of ipecacuanha I believe very ſeldom happen, and, no doubt, ariſe from ſome peculiarity of conſtitution. Medical writers, at leaſt as far as I can recollect, ſeem to have taken little or no notice of its ever producing ſuch an effect.

Mr Leighton, a very reputable ſurgeon-apothecary in Newcaſtle, told me, that the effluvia of ipecacuanha had the very ſame effect upon his wife, as it is above deſcribed to have upon Mrs S.; and that he had once, in particular, very near loſt her, from having ſome of it powdered in his ſhop.

The ipecacuanha that had the above effects upon Mrs S. was the common officinal aſh-coloured, or grey kind.

III.

An Account of the effects of Lightning, in diſcuſſing a Tumour of the Breaſt. Communicated to Dr Duncan, *by Dr* Alexander Eaſon, *Phyſician*, Dublin.

THE following caſe, which was related to me both by Dr Hicks, and by the Rev. Mr Wynne of Abraken in the county of Meath, whoſe wife was the ſubject of it, is ſo far ſingular, that I think it deſerves notice, and may perhaps be of uſe in practice.

Some years ago, Mrs Wynne, after delivery of a child, was affected with a hard ſchirrous tumour in her left breaſt. For the removal of it, ſhe was put upon a courſe of medicine and proper regimen by Dr Hicks. But, as he found it to be very ſtubborn, and was afraid that it might prove cancerous, he deſired her to go to Dublin, to have the advice of ſome eminent ſurgeons. She accordingly went there, and conſulted Meſſrs Daunt and Liſter, who recommended it to her to return to the country, and to purſue the ſame courſe

courſe of medicine for ſome time longer; as they conſidered cutting off the breaſt, or extirpating the tumour, to be the laſt remedy.

Matters continued much in the ſame ſtate as they had been for ſeveral months, when ſhe accidentally received a blow from lightning, as ſhe ſtood at the window obſerving a heavy thunder-ſhower. The lightning by which ſhe was ſtruck ſet fire to the roof of the houſe, which was of thatch; it forced the chimney-piece from the wall, and raiſed the carpet from the floor.

Mrs Wynne received the ſtroke on the left ſhoulder, from which it paſſed acroſs the diſeaſed breaſt and down her back. The colour of her ſilk gown was diſcharged in two different places; the flannel on her breaſt was a little burnt, or rather, it appeared as if an iron, not very hot, had been drawn acroſs it. She fell to the floor, and remained without the uſe of her limbs till night. But, upon their being rubbed with flower of muſtard and ſpirits, ſhe recovered the uſe of them.

Two days after this accident, Dr Hicks viſited her, and, to his great ſurpriſe, he found that the tumour of her breaſt was much ſofter, and conſiderably

ſiderably diminiſhed. In a ſhort time after, it entirely diſappeared. although, for a conſiderable ſpace before, it had reſiſted the power of every medicine which could be exhibited.

From this caſe, a queſtion in practice naturally occurs. Since lightning and electricity are of the ſame nature, ſhould we not be encouraged to try the electric ſhock againſt indurated ſwellings in glands? And may it not ſerve at leaſt to aſſiſt other remedies, when the caſe is ſtubborn?

IV.

Obſervations on the Uſe of the Cabbage-tree-bark, as an Anthelmintic. *By Mr* William Anderſon, *Surgeon in* Edinburgh.

THE practitioners in Britain, who have employed the cabbage-tree-bark for the cure of thoſe afflicted with worms, have differed much in the account they have given of its obvious operation. And, while by many it is held to be a medicine operating very violently, it is not to be imagined that, altho' efficacious, it will ever be ſoon introduced

ced into common uſe. The following letter to Dr Duncan from Mr Anderſon, who practiſed medicine for ſome years in the Weſt-Indies, may ſerve not only in ſome degree to explain theſe differences, but alſo to remove objections which may be entertained to the employment of this uſeful medicine. In this event, we preſume it cannot fail to be acceptable to our readers.

"SIR,

"In conſequence of your requeſt, I ſend you what information I can concerning the wild cabbage bark, or worm bark of Jamaica.

"I have ſeen two different ſorts of it, the one of a much paler colour than the other; and although they be nearly of the ſame taſte, and may probably have the ſame anthelmintic effects, yet I have ſome reaſon to think, that they are not equally ſafe in their exhibition.

"The firſt kind which I have mentioned, I have tried but ſeldom. I have generally found it to act more violently than the other. It often occaſions looſe ſtools, great naufea, and ſuch like ſymptoms, attended with no ſmall degree of uneaſineſs in the belly. In two or three inſtances, I have ſuſpected it for bringing on fainting fits;

which took place ſoon after the medicine was exhibited.

"The ſecond ſort which I have mentioned, or the darker coloured bark, reſembles much the caſſia lignea in colour, though it be of a much coarſer texture. This is the kind commonly uſed in the Weſt Indies. I can give you no botanical deſcription of the trees from which either kind is taken. Nor do I recollect any better mark by which the one kind may be diſtinguiſhed from the other, than the circumſtance of colour which I have now mentioned.

"I am ſenſible that many have objected to the uſe of this medicine, from a ſuppoſition that it acts too violently. But, from the experience which I have had in having given it to a number of patients, I think I could take upon me to employ it in any caſe where an anthelmintic is neceſſary. As it is a medicine but little known in practice in Europe, and, as I believe, it is not very long ſince it was diſcovered to any European practitioner, I think it would be unfortunate, were it rejected without a fair trial. The hazardous ſymptoms which have been aſcribed to it may, I imagine, have followed either from the uſe of the firſt kind, or from an over doſe. Both the

the one and the other of theſe circumſtances, however, might eaſily be guarded againſt. Thus, for example, in place of giving a table ſpoonful of the decoction of the latter kind, which is commonly the firſt doſe for a grown perſon, and which is generally increaſed in a few days to four or five table ſpoonfuls, might we not begin with a tea ſpoonful? This is the method in which I have commonly been in uſe to give it. And I muſt obſerve, that I never ſaw it act violently when thus managed; while, at the ſame time, I have often experienced the beſt effects from it as a powerful anthelmintic.

"I have uſually prepared the decoction which I employ in the following manner.

"Take of the bruiſed bark two ounces and a half; of water two quarts; let it be boiled over a gentle fire to a pint and a half. Strain off the decoction, and let it be kept for uſe, in a bottle well corked. Of this decoction a table ſpoonful is uſually given the firſt morning for a doſe to a grown perſon; one and a half the ſecond, continuing to increaſe it gradually to four or five table ſpoonfuls, and giving it for eight or nine mornings ſucceſſively. After this, I commonly give a doſe of jallap, with a few grains of callo-

mel, which ſeldom fails to bring away the worms, ſome dead, ſome alive. If at any time I have found the decoction produce more than one or two looſe ſtools, I have added to each doſe a few drops of liquid laudanum. And, in general, I have given with each doſe, fifteen or twenty drops of the ſpirit of lavender on a bit of ſugar."

V.

The Hiſtory of a large Prolapſus Uteri, accompanied with ſeveral extraordinary Circumſtances, from which it appears, that the Catamenia flow only from the Uterus, and not from the Vagina. By Mr James Hill, *Surgeon at Dumfries.*

ABOUT the year 1741, a married woman was delivered of her firſt child when ſhe was in the twentieth year of her age. The midwife, who was none of the moſt humane of her profeſſion, pulled very hard in bringing away the placenta; upon which, the woman heard a particular noiſe, and thought ſhe felt ſomething break within her. She complained that ſhe was injured; but the midwife anſwered, in a ſurly manner, that ſhe knew her buſineſs, and had done no harm. A pain and weakneſs continued in

in that ſide; but ſhe was not ſenſible of all the injury that had been done till ſhe got up and began to walk acroſs the room. The uterus then fell down, as large as the fiſt of a man of ordinary ſize, when clinched. It was covered by the vagina reverſed, which came down with it, reſembling a bag. The os tincae projected about an inch below all, and ſeemed to her to reſemble the nipple of a breaſt. Theſe, therefore, were the appellations which ſhe afterwards uſed for diſtinguiſhing theſe parts.

After this firſt prolapſus, ſhe went immediately to bed, and put all up very eaſily. It continued ſo till the next time that ſhe attempted to walk, when it again dropt down as formerly. She took no medical advice upon this occaſion; but, by the perſuaſion of ſome good old woman of her acquaintance, bandages were applied, with a view of keeping it up; but without effect. It always dropt down when ſhe ſtood erect, and the bandages galled and fretted her ſo much, that ſhe threw them all away. It continued regularly to hang down all the day, and was put up every night, in which ſituation it remained till ſhe got up next morning. Her health was in no degree impaired by this affection; ſhe felt no other inconvenience

inconvenience from it than what aroſe from the bulk.

She ſuckled her child for about eighteen months; and, a ſhort time after it was weaned, the catamenia appeared as uſual. She then obſerved, that the menſtrual blood was diſcharged entirely through the nipple, as ſhe called it, and that not a drop came from the bag. Sometimes the blood came away by ſingle drops, and very ſlowly, at other times it flowed ſo faſt that ſhe was obliged to keep within doors; and, in general, her menſtrual evacuation was in great quantity.

After ſome time, ſhe again fell with child. This was attended with much inconvenience during the whole time of geſtation; the uterus ſtill hanging down all the day and being put up at night. At length, however, it grew ſo big, that it could not get down. Then it lay as a heavy load on the os pubis and neighbouring bones, till ſome time in the ſeventh month, when ſhe was delivered. She nurſed this child alſo, and it lived till it was four years old. During the time that ſhe gave ſuck, and after the child was weaned, the circumſtances with reſpect to the

the prolapſus were, in every particular, the ſame as formerly; with this difference only, that the nipple now hung ſomewhat lower.

In the courſe of a few years, ſhe conceived three times after this; but ſhe carried none of her children beyond three months. This ſhe herſelf attributed to her being of a very paſſionate temper. And an abortion in all the caſes enſued on her being much provoked. After every miſcarriage, the nipple hung ſtill farther down than formerly.

Theſe frequent miſcarriages were ſucceeded by a fluor albus, which continued for ſix or ſeven years. During all this time ſhe uniformly obſerved, that, when ſhe menſtruated, the diſcharge was from the nipple; while, on the other hand, the whites came entirely from the bag; which laſt was ſo wet, that ſhe was obliged to have it conſtantly covered with cloths.

While in this ſituation, ſhe was affected with a very ſevere colic, and ſuch a ſwelling of the uterus from cold, that ſhe could not put it up. This obliged her to acquaint me with the whole affair. The colic and ſwelling were ſoon removed; but I did not propoſe to do any thing for the

the other complaints, which continued in the ſituation deſcribed above till the year 1761, when ſhe was attacked with a ſevere intermittent. She was then between forty and fifty years of age; and, after the ague was removed, her menſes did not return. The prolapſus, however, continued as formerly, with this remarkable difference, that the os tincae or nipple coaleſced and was ſkined over. The fluor albus alſo went off, and ſhe has now no trouble from the pendulous uterus, but the bulk, to which ſhe has been accuſtomed for thirty-three years; and, for theſe laſt ten or twelve years, ſhe has not taken the trouble to put it up.

It ſwells ſometimes to a great bulk, from cold or hard labour. At other times, it ſhrinks up like a corrugated ſcrotum, to which it bears a very great reſemblance; as, from being long expoſed to the open air, it is now dry, and of the ſame colour with the reſt of the ſkin.

I imagined, that, after having been ſo long down, and after having aſſumed this appearance, it could not be put up again. But in this I was miſtaken. She was ſtill able to reduce it with the utmoſt eaſe; but it came down again as ſoon

as

as the preſſure was removed. The bulk of this tumour never obſtructed the urethra, as it was entirely below that paſſage. She ſtill continues in good health, and goes about ſo briſkly that few people know ſhe has any diſorder.

SECT.

SECT. III.

Medical News.

The following account of the celebrated Morgagni is extracted from the *Eloge* on that great man, which have been publiſhed, ſince his death, in the Memoirs of the French Academy.

JOHN-BAPTIST MORGAGNI, Doctor of Medicine, firſt Profeſſor of Anatomy in the Univerſity of Padua, and member of ſeveral of the moſt eminent Societies of learned men in Europe, was born in the year 1682, at Forli, a town in the diſtrict La Romagna, in Italy. His parents, who were in eaſy circumſtances, allowed him to follow that courſe in life which his genius dictated. He began his ſtudies at the place of his nativity, but ſoon after removed to Bologna, where,

where, ſuch was the rapidity of his progreſs, that he obtained the degree of Doctor of Medicine, when he had but juſt reached the ſixteenth year of his age. An intimacy which he there contracted with the celebrated Domenico Guglielmini, had probably ſome ſhare in inſpiring him with a reliſh for mathematical learning. But his peculiar taſte for anatomy ſoon found an able and indulgent preceptor in Valſalva, a man whoſe name needs no encomium. Leſs penetration than that of Valſalva, would have been able to diſcover the ſuperior abilities of young Morgagni, among other pupils. On him Valſalva beſtowed the utmoſt attention; and, ſuch was the progreſs he made under this able maſter, that, at the age of twenty, he himſelf taught anatomy with high reputation.

Soon, however, the fame of his prelections, and the number of his pupils, excited the jealouſy of the public profeſſors, and gave riſe to invidious perſecutions. But his abilities and prudence gained him a compleat triumph over his enemies. And all oppoſition to him was finally terminated from his being appointed by the ſenate of Bologna to fill a medical chair, which ſoon became vacant.

But

But the duties of this office, although important, neither occupied the whole of his time, nor ſatisfied his anxious deſire to afford inſtruction. He ſtill continued to labour in ſecret on his favourite ſubject, and ſoon after communicated the fruits of theſe labours to the public in his Adverſaria Anatomica, the firſt of which was publiſhed in the year 1706, the ſecond and third in 1717, and the three others in 1719. Of this work, it is ſufficient to ſay, that it may juſtly be conſidered as one of the moſt beautiful anatomical productions of the preſent age. There he deſcribes many parts of the human body before unknown; and he revives many important diſcoveries, of which his cotemporaries were ignorant. He corrects the faults of other anatomical works, and ſupplies their deficiencies. Throughout the whole, he appears to be an able and impartial critic, an uſeful and perſpicuous commentator, and a ſubtle and ingenious diſcoverer.

The publication of theſe Adverſaria ſpread the fame of Morgagni far beyond the limits of the ſtate of Bologna. Such was his reputation, that the wiſe republic of Venice had no heſitation in making him an offer of the ſecond chair of the theory of medicine in the univerſity of Padua

dua, then vacant by the death of Mr Molinetti; and, to enſure his acceptance, they doubled the emoluments of that appointment. While he was in this department, he publiſhed his treatiſe, intitled, *Nova Inſtitutionum Medicarum Idea*, which firſt appeared at Padua in the year 1712. From this work his former reputation ſuffered no diminution. And ſoon after he roſe, by different ſteps, to be firſt profeſſor of anatomy at that celebrated univerſity.

Although Morgagni was thus finally ſettled at Padua, yet he gave evident proofs of his gratitude and attachment to Bologna, which he conſidered as his native country with reſpect to the ſciences. He exerted his utmoſt efforts in eſtabliſhing the academy of Bologna, of which he was one of the firſt aſſociates; and he enriched their publications with ſeveral valuable and curious papers. Soon after this, the Royal Societies of London and Paris received him among their number. Theſe diſtinguiſhing marks of honour were particularly acceptable to him, and he ever continued to acknowledge them with becoming reſpect.

Not long after the publication of his *Adverſaria Anatomica*, he began, much upon the ſame

plan, his *Epiſtolae Anatomicae*, the firſt of which is dated at Padua in the beginning of April 1726. They conſiſt of twenty in number, publiſhed at different times. Throughout the whole, he equally diſplays the abilities of the critic and the author; and, while he corrects material errors, he at the ſame time publiſhes important diſcoveries.

The works of Morgagni which have already been mentioned, are to be conſidered, in a great meaſure, as ſtrictly anatomical; but he was not more eminent as an anatomiſt, than as a learned and ſucceſsful phyſician. In the year 1760, when he was not far diſtant from the eightieth year of his age, he publiſhed his large and valuable work *De cauſis et ſedibus morborum per anatomen indagatis*. This laſt and moſt important of all his productions, will afford convincing evidence of his induſtry and abilities to lateſt poſterity. Beſides theſe works, he publiſhed, at different periods of his life, ſeveral miſcellaneous pieces, which were afterwards collected into one volume, and printed under his own eye at Padua, in the year 1765.

It does not appear that he had in view any future publications; but he intended to have favoured

voured the world with a compleat edition of all his works, which would probably have been augmented with many new obſervations. In this he was engaged when, on the 5th of December 1771, after he had nearly arrived at the 90th year of his age, death put a period to his long and glorious carreer in the learned world. He deſcended to the grave equally loaded with years and with honours: For, beſides marks of diſtinction from almoſt every country in Europe, the nobility of Forli, the place of his nativity, as an unequivocal proof of eſteem, granted letters of nobleſſe to him and to his poſterity; and they ordered a buſt of Morgagni to be placed in their public hall. So great an honour was it reckoned by that city, to have given birth to ſuch a man.

* * * * * *

On Wedneſday, June 12th, the Magiſtrates and Town-council of Edinburgh declared the Profeſſorſhip of the Inſtitutions of Medicine in the Univerſity to be vacant, as Dr Drummond, who was elected to that office about three years before, had not accepted of it; and, on Wedneſday the 19th of the ſame month, they nominated Dr James Gregory, ſon to the late Profeſſor Gregory, and who had obtained the degree of Doctor of Medicine

about two years before, to ſucceed Dr Drummond. The only other perſon who publicly appeared as a candidate for this office, was Dr Andrew Duncan, who, by appointment of the Town-council, on the recommendation of the Medical Profeſſors, had taught this branch of medicine in the univerſity for the two preceding ſeſſions. All that Dr Duncan wiſhed for was, that the magiſtrates ſhould, as formerly, ſend to the profeſſors a liſt of the candidates that might offer, requeſting their opinion which of them they believed to be beſt qualified for diſcharging the duties of that important office in all its branches; or, if they had any particular reaſon for not thus conſulting the profeſſors, that they ſhould take the opinion of the colleges of phyſicians and ſurgeons at large on the ſame queſtion. But, in place of this, the Lord Provoſt put a verbal queſtion to the Medical Profeſſors, aſking whether they had any objection to Dr James Gregory? To which the Profeſſors returned an anſwer in writing, informing him that they had no objection to Dr Gregory.

Although, however, Dr Duncan's engagements in the college are now terminated, he does not mean to give up teaching. He took an opportunity of announcing his future intentions when

when he concluded his ſummer-courſe of clinical lectures at the Royal Infirmary. As his addreſs to the ſtudents, on that occaſion, will give the beſt account of this undertaking, we ſhall make no apology for preſenting it to our readers.

Concluſion of the Clinical Lectures at Edinburgh, 26th July 1776.

"I have thus, Gentlemen, concluded the preſent courſe; and am now to put a final period to my academical labours in this univerſity. I need not, on this occaſion, call to your remembrance, either the footing on which I was appointed to teach, or the circumſtances by which that appointment is now terminated.

"For two years paſt, I have been engaged in diſcharging the duties of an office, which required the utmoſt exertion of the higheſt medical abilities; and, of all its branches, the Clinical lectures, while it was the moſt difficult, was alſo the moſt intereſting. Reſolved, however, to conjoin to what experience I before had, and to no very limited reading, the utmoſt efforts of unremitting induſtry, I yet entertained ſome hopes that my labours might not be unacceptable. That induſtry, I may now venture to aſſert, has not been without effect; and, in an at-

tempt to extend this uſeful inſtitution beyond its former limits, by teaching a clinical courſe during the ſummer as well as the winter ſeſſion, my endeavours have been crowned with greater ſucceſs than I had reaſon to expect. I can farther reflect, with ſatisfaction, that this ſucceſs has been no leſs beneficial to the hoſpital, than advantageous to myſelf. To you, alſo, I hope it has not been without its uſe; for, unleſs I were to offer an inſult to your underſtandings, I muſt conſider the attendance I have had during this fourth clinical courſe, as an inconteſtible proof of your approbation.

"By this, however, I am far from meaning to inſinuate that the preſent courſe has been without faults. Theſe cannot have eſcaped your obſervation. Yet I may venture to aſſert, that no one among you is more ſenſible of them than I have been myſelf. In any hands, errors and omiſſions were unavoidable; and I truſt, that thoſe which I have here committed, will be judged of with that candour and indulgence to which the beſt intentions are intitled. While, at the ſame time, the records of the hoſpital will bear witneſs, that, in proportion to the number of difficult and dangerous caſes which have been under our care, the ſucceſs of our practice has been

been by no means inconſiderable. Of ſixty patients, we have loſt but three; and theſe too, even at the time of admiſſion, might have been pronounced in an irrecoverable ſtate. I have now, therefore, the ſatisfaction of being able to retire from this arduous taſk, with eaſe in my own mind, and, I hope, not without ſome additional credit in your eſtimation.

"My academical labours have not, indeed, in other reſpects, been attended with equal advantage. I was not without hopes, that, by my exertions here, I ſhould ſtill have been able to hold the office of a teacher in the univerſity; and I had no heſitation in offering myſelf a candidate for the chair lately vacant. In that competition, indeed, I had no powerful connexion, no political intereſt, to aid my cauſe; but I thought that my chance for ſucceſs ſtood on no infirm baſis, when it was reſted on what I had done to deſerve it.

"Although, however, I can no longer act in an equally conſpicuous capacity, yet I hope I may hereafter be employed as a teacher in one not leſs uſeful. I am neither arrived at that age which requires eaſe, nor am I placed in thoſe circumſtances which will allow of it. It is therefore my preſent intention ſtill to dedicate my la-

bours to the ſervice of the ſtudents of medicine at this place. And, when I reflect on the manner in which they have hitherto heard me, I am not without hopes that theſe labours may not be unſucceſsful. In that event, what I now rank among the liſt of misfortunes, may not hereafter, perhaps, deſerve the appellation, Young as I am, I have already lived long enough to have experienced even advantages from diſappointments on other occaſions; and time alone can determine whether the preſent diſappointment may not yet afford me the ſtrongeſt inſtance of the particular favour of Heaven.

"The taſk, indeed, which I now propoſe to myſelf, while it is no leſs difficult than extenſive, is, in ſome reſpects, alſo, not without hazard. Thoſe who are ignorant of the matter, may aſcribe my conduct to motives by which I was never actuated; or may apprehend conſequences from this undertaking which cannot poſſibly follow. Thus, perhaps, it may be the origin of a malicious and groundleſs oppoſition to my advancement in other reſpects. But, conſcious of the integrity of my intentions, perſuaded of the liberality of ſentiment which will actuate the conduct of the preſent profeſſors, and truſting to the continuance of that diſcernment

and

and favour which I have ſo often experienced at the hands of the ſtudents, I am inclined to view the danger as more apparent than real; and it is not now the ſeaſon for me to ſhrink from labour, or to be ſtartled with difficulties.

"I am now, therefore, to employ my endeavours in attempting to exhibit, in one connected view, the whole fundamental principles of the healing art. Thoſe who are acquainted with the ſubject, will at once conclude, that what I here propoſe to comprehend within the ſhort ſpace of ſix months, would afford ample field for conſideration during as many years. It is not, however, my aim to enter into minute diſcuſſions, but to afford merely ſuch a comprehenſive view of general principles as may be a proper baſis for future inquiries; and, avoiding matters of mere curioſity, I propoſe ſolely to confine my attention to topics of real utility. By thus treating ſubjects on a limited ſcale, I hope, that, within the period I have mentioned, I ſhall be able to deliver the moſt eſſential principles, both of the theory and practice of phyſic. By offering what may ſerve as an introduction to more extended diſcuſſion, by ſtating, in a new point of view, intereſting medical queſtions which

ſtill

ſtill remain involved in great obſcurity, and by dwelling principally on chronical affections which are ſometimes, even in courſes ſtrictly confined to practice, from the great attention beſtowed on febrile diſeaſes, either paſſed over in a curſory manner, or entirely omitted, I hope I may be able to render no inconſiderable ſervice to the ſtudy of medicine, even at a place where it is taught in an univerſity by eminent profeſſors.

" But, gentlemen, while I take this opportunity of mentioning my future intentions, I muſt not forget that it is now my duty to return you thanks for favours I have already received. Be aſſured that I ſhall ever retain a due ſenſe of the reſpect and attention with which you have honoured me; and, while I am happy that my preſent labours are thus brought to a termination, yet that happineſs is ſtill accompanied with the diſagreeable reflexion, that I ſhall ſoon be ſeparated from ſome of my beſt friends. I truſt, however, that, while you ſhall be more uſefully employed, in reaping the fruits of thoſe induſtrious exertions which I have here witneſſed, the union which has thus been formed between us will ſtill ſubſiſt. I hope you will long remember, with ſatisfaction, the mutual ties by which we

have

have here been connected; and you may reſt aſſured, that from my mind they ſhall never be obliterated. While I am anxious to hold a place in your eſteem, and to be a ſharer in your affections, I aſk no more than I am willing to beſtow. Wherever you may be ſituated, my beſt wiſhes ſhall always attend you, and in whatever I can promote your intereſt, my utmoſt efforts ſhall be chearfully exerted.

"Farewell, gentlemen: May every one whom you follow as a teacher be equally anxious and aſſiduous to inſtruct you; may every one whom you rank among the number of your friends be equally ſincere when he offers you his ſervices; and, may your honeſt and induſtrious exertions be ever properly and fully rewarded. Continue through life the ſame care and attention which you have here diſplayed, and reſt ſatisfied, that, though the reward of virtue and induſtry may ſometimes be ſlow, yet in the end it is always ſure."

* * * *

Dr Henry Marcard, Phyſician at Hannover, in a letter to Dr Duncan, relates the following inſtance of the congelation of quickſilver.

On

On the 11th of January 1774, a young ſtudent of phyſic at Goettingen, about half an hour after five o'clock in the afternoon, put three drams of quickſilver into a ſmall open glaſs. Upon this, he laid ſome looſe ſnow and ſal ammoniac, mixed in equal parts. This he put out at a window, from the third floor of a houſe, by which it was expoſed to the open air from the north-weſt. And he, at the ſame time, mixed with the ſnow upon which the glaſs ſtood, about two drams of ſal ammoniac.

The ſnow and ſalt were ſoon congealed; but on the mercury no alteration was perceived, till about one o'clock in the morning; Mr Blumenbach then found that the quickſilver was become ſolid. He obſerved, that it was divided into ſix pieces, two were large ones, of more than a dram each. One of them had a hemiſpherical ſhape, the other cylindrical. The four others of a ſmaller ſize, were nearly about half a ſcruple each. They were all with a flat ſide, frozen faſt to the glaſs, but not in contact with the ſnow and ſal ammoniac, with which it was covered. Their colour was different from that of mercury in its liquid ſtate; it was pale, without any gloſs, and

and tended a little to a blue colour, ſomewhat reſembling zinc.

Mr Blumenbach would have broken the glaſs to try how they did under the hammer; but he wiſhed rather to have witneſſes of this curious phaenomenon. At this time, Fahrenheit's thermometer ſtood ten degrees under o. In the morning, about ſeven o'clock, he obſerved, that the hemiſpherical piece began to melt, perhaps from its being more expoſed to the open air, and from its being farther removed from the mixture with ſal ammoniac under the glaſs than the reſt. It had then the appearance of an amalgama, tending a little to that ſide to which Mr Blumenbach inclined the glaſs. The other five pieces ſtill remained ſolid; and he now called for ſeveral of his fellow ſtudents, whoſe names he mentions, and who obſerved, along with him, this extraordinary occurrence. About eight o'clock, the cylindrical piece began to melt; and ſoon after the four ſmaller pieces ſhared the ſame fate. They diſſolved into ſmall bright globules, and ſoon diſappeared in the interſtices of the congealed ſnow and ſal ammoniac.

Mr Blumenbach gave an account of this experiment to the Royal and Electoral Society at Goettingen,

Goettingen, and it was lately publiſhed in the literary gazette of that univerſity, from which the above account is extracted.

This phaenomenon has not been obſerved ſince the year 1769, when it was often ſeen at Peterſburg. On examining the Peterſburg commentaries, I find the principal difference between the two obſervations to have been, that the quickſilver at Goettingen had no gloſs at all, and at Peterſburg it was bright like poliſhed ſilver. But, as Mr Braun took no quickſilver for his experiments but what was incloſed in the bulbs of thermometers, the poliſhed ſurface of the mercury may have been the effect of the glaſs which ſurrounded it.

* * * *

The following articles of Medical and Philoſophical news were communicated to Dr Duncan, by that ingenious and induſtrious phyſician Dr Percival, to whom this work has frequently been indebted on former occaſions.

Extract of a letter from Mr Vaughan to Dr Percival.

Dr Prieſtly has lately ſent a very remarkable paper to the Royal Society, pointing out the uſes

of

of the blood in the animal frame. Mr Cavendiſh has alſo laid before the Society certain experiments, which exhibit an electrical ſhock from an apparatus in water; and which are thought very deciſive with regard to the Torpedo. At Wanſtead, in Eſſex, at half paſt ten o'clock in the evening, my brother and I obſerved the thermometer for near a quarter of an hour, on the 31ſt of January, ſo low as 6¼ deg. it being hung on a ſweet briar twig, about ſix feet diſtant from the north ſide of our houſe.

*

Extract of a letter from Dr Baker to Dr Percival.

I have lately ſeen a dropſy cured by diluents. You have heard that the French King has purchaſed Madame Nouffer's medicine for the tenia. It is remarkable, that Dioſcorides recommends the fern root, four drams for a doſe, againſt worms, and he adds, that the virtues of it are improved by Scammony.

*

Extract of a letter from Mr Forreſter to Dr Percival.

I ſend you ſome Winter's bark lately collected at Terra del Fuego. This Winter's bark is very different from what is ſold as ſuch in the ſhops, and which is the Canella alba coming from Jamaica and China. This latter belongs to the claſs of Dodecandria of Linnaeus; but our Magellanic Winter's bark belongs to the claſs of Polyandria in the ſame ſyſtem. We found in New Zeland, another plant of the ſame genus, but of a different ſpecies, which had likewiſe a very acrid, fiery, pungent taſte. The Magellanic bark has likewiſe ſuch a taſte, but beſides that, a fine aromatic ſmell, which even ſerved us for a kind of incenſe: For its effluvia when burned, or rather ſmoking, are very agreeable.

* * *

We mentioned ſome time ago, that a building had been begun at Edinburgh, for the uſe of the Medical Society there. This building is now ſo far advanced, that the hall intended for the weekly meetings of the Society, was completly fitted up for their reception, and opened by an addreſs to the members from Mr Robert Freer, their ſenior annual preſident, on the 26th of April. At this meeting, beſides the ordinary members of the Society, there

there was a numerous and reſpectable company, conſiſting of moſt of thoſe gentlemen, reſiding in Edinburgh, who have contributed to the expence of the building.

Mr Freer, in his addreſs to the members, after a very modeſt and ſuitable introduction, pointed out the many advantages which muſt neceſſarily reſult from literary inſtitutions, when conducted with propriety. He then recalled to the attention of the members, the numerous advantages which the medical ſtudents at Edinburgh have, for the ſpace of forty years paſt, derived from this ſociety. Of this, repeated acknowledgements from almoſt all its members, and among theſe are to be ranked ſome of the moſt eminent phyſicians who at preſent practice medicine in the Britiſh dominions, afford inconteſtible evidence. But he obſerved, that however great theſe advantages might be, ſtill farther benefits would neceſſarily reſult from the preſent undertaking. And he demonſtrated, in a ſtriking and perſpicuous manner, that many conveniences, tending in a particular manner to facilitate the ſtudy of medicine, which are not enjoyed by any other ſeminary of medical education, would

reſult from this building, when either the funds of the ſociety, or the farther generoſity of the public ſhould enable thoſe to whom the conduct of it is entruſted, to carry all their ſchemes into execution. Among theſe the advantages which will flow from a commodious appartment for chemical and philoſophical experiments, were repreſented as by no means the leaſt conſiderable. Here genius and induſtry may be exerciſed, not more to the improvement of the individual, than to the intereſt of the public.

Having thus ſtated the beneficial conſequences which will neceſſarily follow from this undertaking; he next deſcribed, in lively colours, that gratitude which was due by every future member of the ſociety, and by every ſincere lover of ſcience, to thoſe who had given contributions towards the erection of this building, to thoſe who had become the guardians of it, and to thoſe whoſe earneſt deſire for the future proſperity of the ſociety firſt gave riſe to the ſcheme, whoſe ardour for the improvement of the medical art has prompted them to conduct the execution of every part of it on the moſt uſeful and extenſive plan. He obſerved, that a due

ſenſe

ſenſe of theſe obligations could not fail to be productive of the beſt effects. And he put a period to his addreſs, by pointing out to the members the expectations which would naturally be entertained by thoſe who had generouſly contributed to the undertaking, the fair opportunities which were now afforded for the exertion of genius, and the cenſure to which indolence would neceſſarily be ſubjected. By theſe, and many other convincing arguments, he attempted to inſtigate the members to the ſtrongeſt and moſt unwearied endeavours in the proſecution of medical inquiries.

A liſt of the contributors to this building, elegantly written, is ſuſpended in their hall. It contains the names of almoſt all the medical practitioners at Edinburgh, of many members of the ſociety, who have long been engaged in the practice of medicine at a diſtance from Edinburgh, and of ſeveral other gentlemen, who could be prompted to contribute to this undertaking from no other motive, but an anxious deſire for the improvement of medical education. Yet every one who reads this liſt, will be ſurpriſed at the abſence of ſome names which he would naturally

turally have expected. Many parts of the work ſtill remain to be finiſhed, and farther aid from the public is ſtill requiſite. Contributions are received by Doctors Cullen, Hope, and Duncan, phyſicians in Edinburgh, and by Mr John Murray bookſeller in London.

* * *

Dr Robert James, phyſician in London, died on the 23d of March. He will long be eſteemed by phyſicians as an induſtrious and learned author; and his memory has a claim to the gratitude of mankind, as being the inventor of a celebrated fever powder. It cannot, however, be mentioned without regret, that he ſhould have thought it neceſſary to conceal his method of preparing it.

* * *

David Hume, Eſq; died at Edinburgh on the 25th of Auguſt. He bore a long and painful illneſs with peculiar ſerenity of mind. And he met the ſlow, but manifeſt approaches of death, with becoming fortitude. As a philoſopher of the firſt rank, and as a man, the uniform tenure of whoſe life demonſtrated the conſtant influence of every ſocial and benevolent affection, he will live in the eſteem of future ages.

Dr

* * *

Dr Hope, Profeſſor of Botany at Edinburgh, put into the hands of his ſtudents, during his courſe this ſummer, a new claſſification of the vegetable kingdom. With a particular account of his ſyſtem we are in hopes that we ſhall be able to favour our readers in a future number.

SECT.

SECT. III.

List of New Books.

AN account of the weather and diſeaſes of South Carolina. By Lionel Chalmers, M. D. of Charleſtown, South Carolina. Two volumes 8vo, London.

Caſes in the acute rheumatiſm and gout, with curſory remarks, and the method of treatment. By Thomas Dawſon, M. D. of the college of phyſicians, London. The third edition, with conſiderable additions, 8vo, London.

A ſhort account of the preſent epidemic cough, in a letter to Dr De la Cour at Bath. By William Grant, M. D. 8vo, London.

Experiments and obſervations on different kinds of air, vol. 2d. By Joſeph Prieſtley, L. L. D. 8vo, London.

An

An eſſay on the blood, in which the objections to Mr Hunter's opinion concerning the life of the blood are examined and removed. By G. Leviſon, M. D. 8vo, London.

The diſeaſes of children, and their remedies. By Nicolas Roſen van Roſenſteen, tranſlated into Engliſh, by Andrew Sparrman, M. D. 8vo, London.

Tracts on medical ſubjects. By Charles Eſte, 8vo, London.

Medical advice for the uſe of the army and navy in the preſent American expedition. By William Rowley, M. D. 8vo, London.

Philoſophical tranſactions, giving ſome account of the preſent undertakings, ſtudies, and labours of the ingenious in many conſiderable parts of the world, vol. 65. 4to, London.

Nova genera plantarum quas in itinere ad inſulas maris auſtralis collegerunt, deſcripſerunt, delinearunt, annis 1772-5, Joannes Reinoldus Forreſter, L. L. D. 4to, London.

Eſſays phyſical and chemical, in two parts, by Mr Lavoſier, member of the royal academy at Paris, tranſlated from the French. By Thomas Henry, F. R. S. 8vo, London.

Medical

Medical obſervations and inquiries by a ſociety of phyſicians in London, vol. 5. 8vo, London.

Eight anatomical tables of the human body, containing the principal parts of the ſkeletons and muſcles repreſented in the large tables of Albinus; to which are added conciſe explanations. By John Innes, 4to, Edinburgh.

Traité de l'apoplexie et de ſes differentes eſpeces, avec une nouvelle methode curative dont l'utilité eſt prouvée par l'experience. On y traite egalement de la paralyſée et de ſes differentes eſpeces particulieres, &c. par M. G. B. Ponſart, M. D. medecin conſultant de S. A. S. la Prince eveque de Liege, 12mo, Liege.

Traductions d' anciens ouvrages Latins relatifs a l'agriculture, et a la medecine veterinaire, avec des notes; par M. Saboureux de la Bonnetrice, ecuyer, avocat en parlement, Docteur et profeſſeur de la faculté des droits en l'univerſité de Paris, tom. 5. and 6. 8vo, Paris.

Traité complet d' anatomie, ou deſcription de toutes les parties du corps humain; par M. Sabatier, membre du college de Chirurgie de Paris, cenſeur et profeſſeur royal de l'academie

royale

royale des ſciences et celle de chirurgie, chirurgien major et conſultant de l'hotel royal des invalids, &c. 2 vol. 8vo, Paris.

Avis tres-important au public ſur differentes eſpeces de corps et de ceintures d'une nouvelle invention, par le Sieur d'Offemont, maitre et marchand tailleur a Paris, 8vo, Paris.

Hiſtoire de l'academie royale des ſciences année 1772, premiere partie. Avec les memoires de mathematique et de phyſique pour le meme année. Tirés des regiſtres de cette academie, 4to, Paris.

Mediciniſche commentarien von einer Geſellſhaft der aerzte zu Edinburgh. Erſter und zwenter theil, aus dem Engliſchen, &c. i. e. Medical commentaries by a ſociety of Phyſicians in Edinburgh. Firſt and ſecond volumes, tranſlated from the Engliſh, 8vo, Altenburgh.

Fred. Bern. Albini de natura hominis libellus, 8vo, Lugd. Batavorum.

Supellex anatomica Bern. Siegfr. Albini, 8vo, Lugd. Batavorum.

Joſephi Jacobi Plenck, Chirur. Doctoris, nec non chirurgiae, anatomes, atque artis obſtetriciae profeſſoris

profeſſoris Caeſareo-regii publici ac ordinarii in Caeſareo-regia univerſitate Tyrnavienſi, Pharmacia Chirurgica, ſeu doctrina de medicamentis praeparatis ac compoſitis quae ad curandos morbos externos adhiberi ſolent. 8vo, Viennae.

Joſephi Jacobi Plenck, Chirurgiae Doct. &c. Primae Lineae Anatomes in uſum praelectionum. 8vo, Viennae.

Joſephi Jacobi Plenck, Chirurgiae Doct. &c. Selectus Materiae Chirurgicae, cui additur elenchus inſtrumentorum et faſciarum chirurgicarum. 8vo, Viennae.

Inſtituta Facultatis Medicae Vindobonenſis, curante Antonio Storck Auguſtorum Joſephi II. Imp. et M. Thereſiae Imperatricis Reginae Apoſtol. ab Aul. Conſiliis et Archiatrorum Comite. 8vo, Vindobonae.

Diſſertationes Medicae inaugurales, quas et auctoritate reverendi admodum viri, Gulielmi Robertſon, SS. T. P. Academiae Edinburgenae Praefecti; nec non ampliſſimi ſenatus academici conſenſu, et nobiliſſimae facultatis medicae decreto; pro gradu doctoratus, ſummiſque in medicina honoribus et privilegiis rite et legitime conſequendis;

ſequendis; eruditorum examini ſubjecerunt. Prid. Id. Jun. 1776,

Thomas Bowdler, Britannus, De febrium intermittentium natura et indole.

Dionyſius Dorſey, Americanus, De chloroſi.

Ezekiel-John Dorſey, Americanus, De nutritione.

Thomas Neufville, ex Inſula Jamaica, De Pneumoniae et ſedis ejus hiſtoria.

Ludovicus Brotherſon, ex Inſula Sancti Chriſtopheri, De utero et inflammatione ejuſdem.

Samuel-Martinus Stephenſon, Hibernus, De typho.

Johannes Johnſton, Hibernus, De Phlegmaſiis vel inflammatione.

Johannes Carſon, A. B. Philadelphienſis, De cantharidum hiſtoria, operatione, et uſu.

CONTENTS.

BOOKS.

Lavater, J. C. Physiognomiſche fragmente 11
Darwin, D. experiments on animal fluids 34
Bent, James, account of cutting off the head of the os humeri 40
Brownrigg, William, experimental inquiry 43
Walſh, John, of torpedo's on the coaſt of England 49
Le Febure, G. R. remede eprouvé pour guerir radicalement le cancer 54
Hamilton, Alexander, elements of midwifery 61

MEDICAL OBSERVATIONS.

Singular effects from the application of blue vitriol, by Mr Samuel Foart Simmons, ſurgeon at Wingham 73
Violent aſthmatic fits occaſioned by the effluvia of ipecacuanha, by William Scot, M. D. of Stamfordham, Northumberland. 75
An account of the effects of lightning in the diſcuſſing a tumour of the breaſt, communicated

CONTENTS.

ted to Dr Duncan, by Dr Alexander Eaſon, phyſician Dublin 82

Obſervations on the uſe of the cabbage-tree-bark, as an anthelmintic, by Mr William Anderſon, ſurgeon in Edinburgh. 84

The hiſtory of a large prolapſus uteri, accompanied with ſeveral extraordinary circumſtances, from which it appears, that the catamenia flow only from the uterus, and not from the vagina, by Mr James Hill ſurgeon at Dumfries 88

MEDICAL NEWS 94

LIST OF NEW BOOKS, 118

MEDICAL

AND

PHILOSOPHICAL

COMMENTARIES.

By a SOCIETY in EDINBURGH.

Quod ſi deficiant vires, audacia certè
Laus erit; in magnis et voluiſſe ſat eſt. PROPERT.

VOLUME FOURTH.

PART II.

LONDON:

Printed for J. MURRAY, No. 32. Fleet-ſtreet;
W. CREECH, Succeſſor to Mr KINCAID, and
DRUMMOND, *Edinburgh*; and T.
EWING, Capel-ſtreet, *Dublin*.

M,DCC,LXXVII.

MEDICAL COMMENTARIES.

SECT. I.

An Account of Books.

I.

Diſſertatio Phyſica Experimentalis de effectibus Electricitatis in quaedam corpora organica, Auctore Carolo Herico Koeſtlin. 4to, Tubingae.

IN the firſt part of the eſſay before us, we are informed that, from different circumſtances, but particularly from the peruſal of Doctor Prieſtley's hiſtory of electricity, the author was induced to attempt ſeveral experiments, with a view to determine the effects of electricity, upon

different organized bodies. We are told likewiſe, that his inquiries are confined to the three following ſubjects, viz. The influence of electricity in the incubation of pullets eggs; its influence, in the ſame reſpect, on the eggs of different butterflies; and, laſtly, its effects on the vegetation of different plants.

The electrical apparatus employed, as it differed little from thoſe in common uſe, does not require a particular deſcription; only it may be obſerved, that no electrometer was had recourſe to, the author imagining, that no inſtrument, hitherto invented for that purpoſe, can be much depended on. But he takes notice that, when the weather, and other circumſtances, were favourable for electrical experiments, ſo much matter was generally collected, by three turns of the wheel, as to give a pretty ſmart ſhock, and, by fifty turns, ſpirits of wine could be ſet on fire. Beſides the uſual electrical apparatus, however, he found it neceſſary to have a ſmall table made of wood, ſuſpended to the ceiling of the room by means of four ſilk cords, for the purpoſe of more conveniently applying electricity to the different plants made uſe of in the experiments; and, when any of the eggs were to be electrified, they were placed

placed in glaſs bells made for the purpoſe. Some of the eggs were hatched under hens, and others by means of heat artificially applied, in a furnace of a conſtruction ſimilar to that deſcribed by Mr Begvelin in the hiſtory of the academy of ſciences and belles letters of Berlin for the year 1749.

In the ſeveral experiments that took place, every precaution was fallen upon, to prevent any miſtake or fallacy, with reſpect to the effects of the electrical matter applied to the different ſubſtances. All the eggs made uſe of, as well thoſe electrified as thoſe that were not, were recent, and taken from ſuch hens as had daily communication with cocks. The veſſels in which the plants were placed, were always as nearly the ſame in point of ſize as poſſible, as was likewiſe the quantity and quality of the earths made uſe of. The plants and ſeeds were all placed at the ſame depths, and had always the ſame expoſure, both with reſpect to heat, air, and light.

Before proceeding to enumerate the ſeveral experiments, our author thinks it neceſſary to mention the different modes in which electricity was applied; and theſe were,

I. Positively.

1. Without sparks.

a. The substance to be electrified, being insulated, and having, at the same time, a communication with the conductor, by means of an electric. This our author terms *simple electricity*, or the electrical fomentation.

b. The body to be electrified, not being insulated, but connected immediately with the surrounding elements.

II. Negatively, by conjoining the body to be electrified with the cushion of the globe.

III. Positively and negatively together, or in what are termed *electrical shocks*.

1. The substances to be electrified, being insulated, and connected with that side of the charged phial positively-electrified, and a connecting chain then applied to the negatively-electrified side of the phial.

2. The body to be electrified, not being insulated, being connected with the negatively-electrified side of the phial, and afterwards, on the phial being charged with the positively electrified side.

The

The firſt experiment was upon pullets eggs. Six eggs which had been expoſed to the electrical fomentation, three times a-day, for five days, and for a quarter of an hour each time, were, on the 24th of June, placed below a hen, together with other ſix eggs that had not been electrified. The electrified eggs received three other applications, ſimilar to the former, on the 25th, and one on the morning of the 26th. Although the eggs had been placed below the hen on the 24th, yet, as ſhe did not begin to ſit conſtantly upon them till the evening of the 26th, that period, therefore, muſt be conſidered as the commencement of the incubation.

On the 14th of July, viz. the 18th day of incubation, two fine chicks were produced from two of the electrified eggs; and, on the fifteenth, the other four electrified eggs alſo afforded fine birds. The author, after waiting till the 20th of the month for the fruits of the non-electrified eggs, and nothing then appearing, opened them, and found them all entirely rotten, without the leaſt rudiments of chicks being obſervable.

The birds from the electrified eggs were, at firſt, and all along, remarkably large and healthy,

and continued to thrive even without the aſſiſtance of the mother.

On the 4th of July was commenced an experiment ſimilar to the above, and the conſequence was, that, on the 19th day from the time of incubation, four out of ſix electrified eggs produced fine birds; and as, after three days, there were no appearance of chicks from any of the reſt, they were all broke, when two out of five eggs, which had *not* been electrified, were found to contain living birds. The reſt were all rotten.

Two other experiments on eggs are enumerated, in which conſiderable variations took place, both with reſpect to the quantity of electricity uſed, and the manner in which it was applied. The reſult was, that eggs to which ſimple electricity had been applied, and that whether before or after the commencement of incubation, not only yielded chicks of a larger and ſtronger make than uſual, but theſe too at a more earlier period than they commonly appear. On the contrary, however, when ſparks were taken from eggs electrified in that manner, no evident difference could be obſerved between the produce of theſe and of ſuch as had never been electrified: And again, eggs to which the electrical

ſhock

ſhock had been frequently applied, ſeemed to be rendered entirely unfit for the purpoſe of incubation; none of them producing chicks on being expoſed to the due degree of heat, and, in one egg that had been violently electrified, the yolk and white were found mixed together.

The effects of electricity on the ova of different kinds of butterflies, were nearly the ſame as thoſe produced upon pullets eggs; the electrical atmoſphere, when frequently applied, always quickning their hatching.

In our author's experiments on vegetation, ſeveral remarkable circumſtances occurred, which prove, with certainty, the influence of electricity on the growth of plants. His firſt trials in this way, were upon ſeeds newly ſown; and the concluſions that may be drawn from this part of the work, are,

1. That the germination of plants is greatly accelerated, by the application of ſimple electricity, and that in proportion to the quantity of electric matter made uſe of, in whatever kind of earth the ſeeds have been planted.

2. That, in this reſpect, electricity ſeems to have even more conſiderable effects than dung mixed

mixed with earth, in which ſeeds are to be ſown.

3. That, in ſuch experiments, the nature of the veſſels that contain the earth, ſeems to have ſome influence: Thus, electricity applied to ſeeds and earth, contained in metallic veſſels, proved more powerful in its effects, than when glaſs vaſes were made uſe of, and in theſe again, it ſeemed more active than when earthen potts were had recourſe to.

4. That the effects of electricity in promoting vegetation, appeared equally remarkable in the open air, as in the confined air of an apartment.

5. That, although watering earth in which ſeeds have been ſown, does not appear requiſite for rendering the effects of electricity on vegetation remarkable, yet that ſprinkling the earth with water, to which the electrical fomentation has been previouſly communicated, ſeems to have a conſiderable influence.

6. That the vegetation of plants may be retard- by their ſeeds being *negatively* electrified.

7. That although the growth of ſeeds can be conſiderably

conſiderably haſtened by their being expoſed to the influence of the electrical fomentation; yet that no plants were produced from ſuch ſeeds as the *electric ſhock* had been communicated to. And,

8. That electricity, from ſeveral experiments, both upon annual and perennial plants, had evidently a conſiderable influence in forwarding vegetation. With theſe laſt, however, electrical ſhocks do not ſeem to have been made trial of, the plants having been merely expoſed to the electric atmoſphere.

After giving a minute detail of the ſeveral experiments, our author next endeavours to account, as nearly as poſſible, for the ſeveral effects produced by electricity. The electric matter which he, with others, ſuppoſes, in certain quantities, to be diffuſed over all bodies is, he ſays, a fluid, ſingularly elaſtic, igneous, or at leaſt very analogous to fire, and of a remarkably irritating nature; and, from theſe different properties, many of the phaenomena which occur in electricity may, he thinks, be accounted for.

II.

J. Raymond, Diſſ. exhib. deſcriptionem Febrium Intermittentium Autumnalium Quotannis Mittelburgi et in Vicinis Seelandiae Batavae locis graſſantium. *Vid.* Ern. Godofr. Baldinger *Sylloge Selectiorum Opuſculorum Argumenti Medico-practici.* 8vo, Gottingae.

THE intermittent fever here deſcribed by Mr Raymond, prevails very univerſally, not only in the iſlands of Zealand, but likewiſe in ſimilar ſituations on the neighbouring coaſt of Flanders. It is leſs frequent in the diſtrict of Holland; but is often met with both in Eaſt and Weſt Frieſland.

The firſt ſymptoms of this diſorder are, a belching from the ſtomach, with other appearances of indigeſtion; to theſe ſucceed a cold and hot fit, which laſt is ſo violent, and ſo laſting, as to cauſe the diſeaſe to be miſtaken for an acute fever of the continued kind. The intermiſſion of febrile ſymptoms is, in the beginning of the diſeaſe, ſo inconſiderable, as often not to be obſerved;

ſerved; if proper attention, however, be given, a ſlight remiſſion may generally be diſcovered. The new paroxyſm is always uſhered in with a gentle coldneſs, and, by returning at ſtated periods, the diſorder is, by that circumſtance, ſufficiently diſtinguiſhed from a real continued fever. There is likewiſe another remarkable diſtinction which occurs between the two diſeaſes; for if, in the fever now under conſideration, are preſcribed, bloodlettings, purgatives, and ſuch other ſtrong evacuating medicines as in continued fevers are frequently of ſervice, different chronic diſorders are thereby often produced; and, on the contrary, if very warm ſtimulating remedies are made uſe of, dangerous continued fevers are often the conſequence.

Next to the violent heat, which is in this fever always a very troubleſome ſymptom, the bilioſa colluvies ſhews itſelf moſt remarkably; the belly ſwells, the patient is troubled with a conſtant vomiting, and weight in the hypochondria; the whole mouth is from the beginning, covered with a yellow bitter mucus; and ſo univerſally is the bile diffuſed over the ſyſtem, that a bilious humour is frequently obſerved to fill, and tranſpire from the ſeveral glands about the neck. In the courſe

courſe of the diſeaſe, violent headachs with delirium occur; the ſleep is diſturbed, and not refreſhing; the patient is ſeized with ſtartings, and other convulſive motions in the muſcles. Angina is a common ſymptom, together with aphthæ, and pains in the abdomen.—Sometimes a coſtiveneſs takes place, and at other times profuſe diarrhoeas; purple coloured eruptions break out, that neither appear to be critical, nor even to alleviate any of the ſymptoms; nay, they rather, on the contrary, ſeem to increaſe the violence of the heat; and profuſe ſweatings often occur, without any other effect, however, than that of weakening the patient. Amidſt the violence of theſe ſeveral ſymptoms, a certain and pathognomonic characteriſtic of the diſorder may, by an attentive obſerver, be always diſcovered. At ſtated intervals, of a longer or ſhorter duration, an entire remiſſion of all the ſymptoms takes place, in ſo much, that, excepting a general debility, the patient has frequently at theſe times no other complaint. This more particularly is the caſe, when the diſeaſe has been of three or four days continuance, the diſtinct paroxyſms being then more eaſily obſerved than in the firſt days of the fever; at leaſt,

it

it always is ſo, if the diſorder has not from the beginning been improperly treated.

This fever in general at firſt ſhews itſelf in the form of a tertian intermittent; it afterwards, often indeed, aſſumes the appearance of a quotidian, and by this means the paroxyſms are always conſiderably lengthened. Sometimes, again, a quartan is the type under which it appears: From the long continuance of that ſpecies of intermittent, and the ſeveral affections of the viſcera it is often attended with, this always renders the complaint not only more tedious, but in reality more dangerous.

Although the ſymptoms of this diſorder are of a very alarming nature, yet a great proportion of ſuch as are attacked with it recover; and it is always obſerved, if ever the violence of the fever abates, the patient then certainly, though ſlowly, recovers the uſe of all his functions. It is likewiſe remarkable, that ſuch patients always recover moſt quickly, as from the beginning have had the bilious humours properly evacuated; and, *vice verſa*, ſuch as are carried off by the diſeaſe, die ſeemingly in a ſtate of apoplexy, which is commonly preceded by ſuch a degree of coma or torpor, as the patient can ſcarce be rouſed from. The face

face becomes red and turgid; the tongue remarkably parched, the patient at the ſame time making no complaint of thirſt; the different excrements are paſſed involuntarily; the pulſe intermits, and the breathing becomes ſlow and difficult. It is always obſerved, that plethoric robuſt people recover with greater difficulty from this ſpecies of fever, than thoſe of an oppoſite temperament; and hence ſtout young men are always more violently attacked than old people, and ſuch as are of lax phlegmatic habits. All ages are equally liable to the diſtemper; infants are as frequently ſeized with it as adults, and rich people as well as poor. It is obſerved, however, that the diſorder is always moſt ſevere on ſuch as have been much expoſed to the heats of ſummer, and on thoſe alſo that have been obliged to to live upon fat rancid animal food.

The origin of this diſorder is, by our author, attributed chiefly to a putreſcency of the humours in general, but particularly of the bile, which may be excited by various cauſes; but, about Middleburg, and all over the iſland of Walcher, the principal cauſe, we are told, is the want of freſh water; for, as that iſland is almoſt wholly below the level of the ſea, there are neither

ther ſprings nor freſh water rivers; ſo that the inhabitants have to truſt entirely to what they can collect by ſpouts, in the rainy ſeaſons, from the ſides of houſes. Such water, from the variety of putreſcent matters, with which it is frequently unavoidably mixed, and from the manner of keeping it in ciſterns, ſoon becomes putrid, and very unfit for uſe; it is no wonder, therefore, that the juices of ſuch people as are obliged daily to have recourſe to it, ſoon acquire a putreſcent tendency. This, together with a ſtoppage of perſpiration, occaſioned by cold wet weather ſucceeding to warm ſummers, our author conſiders as the proximate cauſe of this ſpecies of fever. From a variety of facts, it is well known, that this diſorder, though frequently epidemic, yet is not in the leaſt contagious. Phyſicians who attend the ſick, and other people who live in the ſame houſe with them, are never ſeized with ſuch complaints, unleſs they have previouſly received the ſeeds of infection. Nay, children even have been known to ſuck their infected nurſes with impunity.

In the treatment of this diſorder, blood-letting is never advifeable, excepting in young plethoric patients, where, to a certain degree, it may ſometimes be neceſſary, either with a view to mode-

rate any inflammatory ſymptoms that may occur, or to prevent any riſk from the violent operation of ſuch emetics as are found requiſite.

Both the nauſea, and the natural vomiting which ſo frequently occur in this complaint, evidently point out the propriety of having recourſe to emetics; and of theſe the moſt gentle are much preferable to thoſe of a more ſtimulating nature; ſo that ipecacuanha is always to be preferred to tartar emetic. In general, however, and eſpecially in the beginning of the diſorder, neither of thoſe articles are neceſſary, as warm water, merely, anſwers every purpoſe fully better than either. It not only acts as an evacuant, but ſuch of it as is not thrown up, by mixing with the putreſcent particles of the fluids, tends thereby not only to correct their acrimony, but may likewiſe aſſiſt in carrying them off by the ſkin and other emunctories. For this reaſon, it ſhould be given in large draughts, and theſe frequently repeated, eſpecially ſoon before the return of a paroxyſm is expected.

When the firſt paroxyſm is over, gentle laxatives are generally had recourſe to, and almoſt always with evident good effects. Manna, tamarinds, and caſſia are the articles commonly preſcribed.

ſcribed. During the continuance of the fit, it is found of ſervice to throw in different abſorbent powders, as is alſo the uſe of ſome of the neutral ſalts, and particularly nitre and cream of tartar; to which a few grains of rhubarb are ſometimes conjoined with advantage. For ordinary drink, barley-water, acidulated with ſpirits of vitriol or nitre, anſwers very well; tea is likewiſe frequently uſed, as alſo water in which bread has been boiled, with a ſmall proportion of wine, a moderate uſe of which not only is of ſervice by ſupporting the patient, but tends in reality to ſuppreſs that violent heat which always prevails here.

In the firſt days of the diſeaſe, no kind of nouriſhment is ever given, excepting ſuch drinks as have been mentioned; afterwards weak fleſh broths, acidulated with citron juice, may be allowed. Butter milk is ſometimes given too, both by itſelf, and made into porridge with flower. Ripe fruits, ſuch as apples, prunes, and cherries, roaſted or boiled in their own juices, may here likewiſe be ſafely permitted. Whatever nouriſhment is neceſſary, however, ſhould be taken a conſiderable time before a paroxyſm is expected, as meat of any kind, taken immediately before a fit, always occaſions a great deal of uneaſineſs to the patient.

By proper attention, and the continuance of ſuch a courſe as has been preſcribed, a great proportion of thoſe attacked with this diſorder recover from it; it ſometimes, however, proves very obſtinate, eſpecially in ſuch as have previouſly laboured under any complaints in the abdominal viſcera.

Of all the ſymptoms that occur in this diſeaſe, jaundice is moſt to be dreaded; for, although the feveriſh ſymptoms be got the better of, yet a dropſy, or ſome other dangerous diſorder of a chronic nature, always ſupervenes. In ſuch caſes, ſoap with rhubarb, and other reſolvent medicines, muſt be had recourſe to inwardly, along with the external uſe of proper ointments, and fomentations to the abdomen, with a view to the reſolution of ſuch obſtructions as may have taken place. The Peruvian bark, in this diſeaſe, when prudently adminiſtered, is always of the greateſt advantage; there are ſome periods of the complaint, however, in which it cannot be uſed but with the greateſt riſk, particularly when any obſtruction in the liver, or other abdominal viſcera, takes place; as likewiſe when the patient is troubled with a cough, or any other pectoral complaint. In that caſe, the uſe of Peruvian bark almoſt certainly lays the foundation

foundation of a real phthiſis. But, whenever the diſorder, by its long continuance, ſeems to be aſſuming the form of a continued fever, when no obſtructions in the viſcera take place, when the pulſe is feeble and the patient much debilitated, and eſpecially when the different evacuations have been carried a proper length, the bark is then the only remedy to be depended on, and ſhould be carefully exhibited, in proper quantities, between the different paroxyſms. Even in the moſt dangerous ſtate of the diſorder, the bark is frequently had recourſe to with advantage, as in the words of our author; 'Omnium maxime cortex prodeſt, 'quando ſopor comatoſus, ex quo difficulter excita-'tur aeger, cum facie Hippocratica, et intercurren-'tes Leipothymiæ, profundaque et oblivioſa inſen-'ſibilitas, cum pulſu intermittente et reſpiratione 'ſtertoroſa, prænunciant lethargum vel apoplexi-'am inſtare. Tum ſcilicet cortex optimus cum 'multis acidis, præſertim vitriolicis, etiam cum 'rhabarbaro, ſi opus, et, cum ſalibus mediis mari-'tatus, cito et copioſe eſt dandus. Ab ejus enim 'uſu homo iterum evigilat, quaſi redeunt ſen-'ſus, redit pulſuum et reſpirationis integritas, ho-'moque, ex orci quaſi faucibus ereptus, dein vitam 'protrahit, ut reliquiæ morbi queant ſuperari.'

When the diſorder aſſumes the form of a quartan intermittent, as it ſometimes does, its cure can never be ſoon expected, ſcarcely ever before the return of one or more ſummers; and what in ſuch a form always renders it more dangerous, is, that, in theſe regions, a ſcurvy frequently ſupervenes in the courſe of the winter. In the beginning of this ſtate of the diſeaſe, little or nothing can be done; for evacuations, eſpecially when the autumn is much advanced, have always the effect of inducing a double quartan, and febrifuge remedies cannot then be had recourſe to, but with conſiderable riſk. Reſolvents, however, and bitters, with other ſtomachic medicines, may, in the mean time, be uſed with advantage; and, as ſoon as ſpring commences, antiſcorbutics may be had recourſe to, and afterwards the bark conjoined with theſe. In ſuch caſes, where the putrid ſcurvy has come any conſiderable length, as may be known by the eroſion of the gums, and other ſymptoms that evidently ſhew themſelves, the ſtronger acids, and eſpecially the ol. vitrioli, ſhould be had recourſe to, the vegetable acid being then not found ſtrong enough to correct the putreſcence that takes place in the blood.

After theſe general obſervations on the conjunction

of

of putrid ſcurvy, with the diſorder now under conſideration, our author then proceeds to the concluſion of the diſſertation, with a few remarks on what he terms the muriatic ſcurvy; and, the more clearly to convey his meaning, we here preſent our readers with his own words: 'Quod ſi 'autem ſcorbutus ſic dictus muriaticus accedat, 'qui apud nos propter aëris marini exhalationes 'ſalſas, et propter copioſiorem nautarum vivendi 'modum, quem etiam plures alii imitari coguntur, 'ſcilicet, propter halecum et piſcium ſalitorum, 'carniſque fumo et ſale conditæ quotidianam uſu- 'ram, etiam ob vegetabilium recentium in mag- 'no hominum numero penuriam et raram diſpen- 'ſationem, frequens eſt, et qui ex rigiditate ac dolore 'rheumatico, muſculorum, ex pruritu cutis, ex eda- 'citate et ſiticuloſitate perpetua, ex urina male 'cocta et acri, ex ſpaſticis nervorum contractioni- 'bus, epidermidis ſiccitate et deſquamatione, ulceri- 'bus late ſerpentibus, et ex rebelli pertinacia febris 'quartanæ contra ſalutarem corticis Peruviani 'uſum cognoſcitur, tum præter antiſcorbutica or- 'dinaria imprimis aqua calcis vivæ, ex conchiliis 'marinis exuſtæ, et cum æquali lactis copia 'miſta, bibenda commendatur. Sæpe aqua Sel- 'terana et Spadana, cum regimine his aquis debito,

'adhiberi debet. Prodeſt etiam peregrinatio et 'ſoli natalis cum aëre magis libero, præſertim 'montano, uſque ad plenariam ſanationem com-'mutatio.'

III.

Obſervations ſur la Situation des Viſceres du Bas-ventre ches les Enfans, et ſur le deplacement qu'ils eprouvent dans un age plus avancé, par Monſ. Portal. Vid. *L'hiſtoire de l'Academie Royale des Sciences à Paris, année* 1771, 4to, Paris.

AN exact knowledge of the ſituation of the abdominal viſcera, in all ages, is of the greateſt conſequence to every practitioner. And as Mr Portal has had the beſt opportunities for information on the ſubject, his obſervations deſerve particular attention.

The abdomen is, by Mr Portal, divided into three regions, the ſuperior, middle, and inferior; in the firſt are comprehended thoſe parts that are bounded by the diaphragm and ribs; the ſecond extends

extends from the ribs to the pelvis, and the pelvis itſelf conſtitutes the laſt.

Theſe three regions form one large cavity, in which are contained all the viſcera of the lower belly; the extent, however, of theſe different diviſions varies in different ages, in different ſubjects, and is altered likewiſe by diſeaſe. In new-born infants, the diſtance between the ſternum and pelvis is near to a third of their whole length; in adults, the length of the abdomen does not extend to a fifth of the whole. In children of three feet in height, the abdomen meaſures nearly one foot, and it is not found to exceed that in adults five feet high.

This difference with reſpect to the abdomen in infants and in adults, is confined entirely to the middle region, which, in children, is not only much longer, but, in proportion, much more extenſive in every reſpect, than in people come to their full ſize. In the former, it is wider from before backwards, in children the ſpine being almoſt entirely ſtraight, whereas, in adults, it becomes conſiderably crooked. In children too, it is much wider from one ſide to the other than in adults, as in them the ribs bend more outwards than they do in the latter.

Although

Although this middle abdominal region, however, is in children ſo extenſive, yet both the ſuperior and inferior diviſions are not proportionally ſo; nay, they are even ſmall, in compariſon to thoſe of adults. The pelvis is incomparably ſmaller in the foetus than in adults; in the former, the under extremity of the os ſacrum bends conſiderably over towards the pubis. The horizontal branch of the pubis is both ſhort and flat, and the tuberoſities of the iſchia are turned backwards. Every circumſtance, therefore, concurs to ſhorten the cavities of both the inferior and ſuperior abdominal regions; in ſo much that, in young children, all the viſcera of the lower belly are contained in what we have termed the middle diviſion, and remain there, till, by degrees, they inſinuate themſelves into the other two regions, as theſe, in courſe of time, come to be enlarged. Before treating, however, of the changes the viſcera undergo in point of ſituation from the infantine ſtate to that of adults, it will not be improper firſt to give a more particular deſcription of their ſeveral ſituations in the former.

The ſtomach in infants, in place of being ſituated tranſverſely, as is the caſe in adults, hangs almoſt perpendicularly. It extends from what is commonly

commonly termed the epigaſtric region, to the umbilical, inclining a very little to the left above, and to the right ſide below; having its convex ſide or great curve turned to the left, and the ſmall curvature towards the right. In conſequence of this ſituation of the ſtomach, the omentum, which is always attached to its great curvature, lies more towards the left than the right ſide; and, from want of knowledge of this circumſtance, practitioners have often treated, as diſeaſes of the colon, ſuch complaints in children, as, on opening the bodies after death, have been found ſeated in the omentum only. The liver is very large in the foetus, in proportion to its ſize in adults, and is ſituated almoſt entirely in the middle region of the abdomen; it appears to the touch externally, indeed, much nearer the linea alba than it is ever found to be in a more advanced age. At this period the duodenum is placed almoſt entirely behind the ſtomach. The ſpleen in infants is always eaſily diſcovered by the touch, immediately below the falſe ribs; this, in adults, never can be done, but in a diſeaſed ſtate of that viſcus. In the former, a conſiderable part of it is ſituated in the middle region of the abdomen; whereas,

whereas, in the latter, its ſeat is always in the left hypochondrium.

In very young ſubjects the urinary bladder is ſituated entirely without the pelvis, is remarkably large in proportion to the other parts, and extends to within a very ſmall diſtance of the navel; when full of urine, it makes a very evident prominence near about the middle and inferior part of the abdomen. This poſition of the bladder, above the os pubis, ought to be particularly attended to; for when, in infancy, it is neceſſary to have recourſe to lithotomy, the high operation ſhould always be preferred to thoſe where the opening is made in the perinaeum. This operation, however, has never been favourably looked upon. But, as the ſhorteſt and eaſieſt paſſage to the bladder is, in lithotomy, a principal object, it ought certainly, in children, to be preferred to every other, the bladder in them lying ſo near to the external teguments above the pubes.

In young girls, the womb, with its two ovaria, are conſiderably raiſed above the os pubis, and, when ſwelled, a circumſtance, however, which, at this age, ſeldom occurs, it can be eaſily diſtinguiſhed by the touch externally.

Such

Such are the ſituations of the viſcera in childhood. In a more advanced age, however, they are entirely changed; the ribs become leſs crooked, the diaphragm more vaulted, and the liver gets a higher ſituation, inſomuch that, about the fifteenth year, it is almoſt entirely covered under the ribs, when the perſon is in an horizontal poſture. This change of ſituation in the liver occaſions a manifeſt alteration likewiſe in the poſition of the ſtomach. By degrees it deviates from the perpendicular to a horizontal line; and according as it changes its ſituation, the omentum recedes entirely from the left ſide, and proceeds to occupy the middle part of the lower belly. Although the horizontal lobe of the liver can be diſtinguiſhed by the touch in adults, yet never by any means ſo evidently as in children; it is ſituated almoſt upon the under extremity of the oeſophagus, ſo that, when it becomes preternaturally enlarged, it compreſſes that canal ſo entirely as to prevent the entrance of the aliments into the ſtomach. Two ſuch caſes our author mentions his having met with; and, in both, the patients ſuffered greatly from very violent vomitings with which they were attacked ſome time before death.

In

In the mean time, the pelvis becomes every way larger; the pubis turns conſiderably longer, and acquires a greater height; the os ſacrum ſtretches farther back, and the tuberoſities of the iſchium puſh outwards, and to a greater diſtance from the os coccigis.

Such a conſiderable augmentation in the cavity of the inferior part of the abdomen, gives riſe to ſuch changes in the poſition of the different viſcera, as deſerves, from practitioners, very particular attention. Thoſe which, from their make and nature, have been accuſtomed to float in the middle region of the abdomen, now fall down into the pelvis; this is particularly the caſe with the bladder, which, in falling down, has its ſuperior part carried forward, and the urachus, which had been attached to the fundus, is tore away, and never again connected with it. This fact was firſt taken notice of by Mr Lieutaud, and is not as yet believed by many anatomiſts. The ſtudy of anatomy, in different periods of life, offers a new field for diſcoveries; and there is little doubt of its being proſecuted farther, but that the various opinions of different anatomiſts on the ſame ſubject may be reconciled, they having generally conſidered as certain and conſtant ſuch appearances as they had obſerved at any particular age.

The

The ſame cauſe which produces the change of poſition in the bladder, occaſions alſo that of the uterus. The womb, which, in childhood, had been placed above the pubis, by degrees falls into the pelvis, inſomuch that, in adult women, who are not pregnant, it is always, in a ſound ſtate at leaſt, entirely ſunk in it. Both the bladder and uterus acquire an oblique ſituation in the pelvis, owing to the deſcent of the inteſtines; this obliquity, that becomes in a manner natural to both theſe viſcera, was obſeved by Gunzius and Camper. On examining ſuch caſes of herniae of the bladder as have yet occurred, it is found to have happened much more frequently in the right than the left ſide; and it is certain that the left ovarium is generally higher ſituated than the right. And, indeed, the bottom of the uterus cannot be inclined towards the right ſide of the pelvis, without having the ovarium attached to it carried down at the ſame time. There is likewiſe another peculiarity which ſometimes occurs in the poſition of the left ovarium, it being frequently found almoſt contiguous to the lower lumbar vertebra. A caſe of diſeaſed ovarium is here related by the author: He was conſulted, a-

long

long with other two phyſicians, by a lady attacked with a ſchirrous tumor, about four fingers breadth below, and a little to the left ſide of the umbilicus. His opinion was, that the ſwelling adhered to the bottom of the uterus, and that it was not produced by either of the ovaria, which he imagined lay more to each ſide. On opening the body, however, after death, the womb was found in the pelvis, with the right ovarium below; while the left, which was of a prodigious ſize and hardneſs, was placed near to the loweſt vertebra of the loins, and above the left ſide of the uterus.

IV.

Recapitulation des Baptemes, Mariages, Mortuaires, et Enfans-trouvés de la Ville et Faubourgs de Paris, depuis l'année 1709, *juſques et compris l'année* 1770. *Par* M. Moreau *fils*. Vide *l'Hiſtoire de l'Academie Royale des Sciences à Paris, année* 1771, 4to, Paris.

THE firſt attempt to diſcover the number of marriages, baptiſms, and deaths, that annually occur in the city of Paris, was commenced

ced in the month of January 1670, and continued monthly for two years and upwards. Mr Morand, in the firſt part of his paper, has inſerted a copy of this liſt for the firſt two years of the undertaking, together with that of the three firſt months of the year 1681, which is all that, after the moſt diligent ſearch, he has been able to procure. In the year 1709, a ſimilar plan was begun, and has been regularly continued ever ſince; of this the following table is an exact copy; and we are told, that it is to be regularly carried on, and its contents communicated in the ſubſequent volumes of the memoirs of the academy, every tenth year. The very great increaſe, that of late years appears by the table to have occurred in the number of infants, admitted to the Foundling Hoſpital at Paris, is owing, we are informed, to the greater difficulty, now experienced by the lower ſet of people, in rearing and maintaining their children, than was the caſe ſome years ago.

Years.	Baptiſms.	Marriages.	Deaths.	Foundlings.
1709	16910	3047	29288	
1710	13634	3382	22389	1179
1711	16503	4484	15920	1653
1712	16589	4264	15721	1743
1713	16763	4289	14860	1741
1714	16866	4553	16380	1734
1715	17631	4555	15478	1795
1716	17719	3795	17410	1780
1717	18660	4527	13533	1673
1718	18517	4290	12954	1723
1719	18620	4378	24151	1734
1720	17679	6105	20371	1441
1721	19917	4467	15978	1730
1722	19673	4464	15517	1857
1723	19622	4255	20024	1982
1724	19828	4278	19719	2095
1725	18564	3311	18039	2260
1726	18209	3295	19022	2466
1727	18715	3813	19100	2302
1728	18189	4198	16887	2166
1729	18163	4231	19852	2336
1730	18966	4403	17452	2491
1731	18877	4169	20832	2539
1732	18605	3983	17532	2474
1733	17825	4132	17466	2414
1734	19835	4133	15122	2654
1735	18862	3876	16196	2577
1736	18877	3990	18900	2681
1737	19767	4158	18678	2914
1738	18617	4247	19581	2786
1739	19781	4108	21986	3289
1740	18632	4017	25284	3150
1741	18578	3928	23574	3388
1742	17722	4178	22784	3163
1743	17873	5143	19033	3101
1744	18318	4210	16205	3034

Years.	Baptisms.		Marriages.	Deaths.		Foundlings.	
	Boys.	Girls.		Men.	Women.	Boys.	Girls.
1745	9454	9386	4135	9261	8061	1661	1573
1746	9363	8984	4146	9418	8633	1677	1605
1747	9394	9052	4169	3592	8566	1677	1692
1748	9197	8710	4003	10265	9264	1762	1667
1749	9819	9339	4263	9864	8743	1923	1852
1750	9711	9324	4619	9961	8123	1943	1842
1751	9905	9416	5013	8800	7873	1922	1861
1752	10308	9909	4359	9573	8179	2046	2081
1753	10229	9500	4146	11676	10040	2216	2113
1754	9507	9402	4143	11978	9620	2117	2114
1755	9725	9687	4501	10930	9091	2171	2102
1756	10169	9837	4710	9083	8050	2453	2374
1757	9931	9438	4089	10682	9438	2502	2467
1758	9677	9471	4342	10027	9175	2632	2450
1759	9798	9260	4059	9560	8886	2693	2571
1760	9214	8777	3787	9674	8767	2573	2458
1761	9414	8960	3947	9446	8228	2747	2671
1762	9047	8762	4113	10691	9276	2698	2591
1763	8935	8524	4479	11126	8045	2630	2623
1764	9745	9659	4838	9438	7761	2825	2735
1765	9872	9567	4782	9651	9383	2780	2715
1766	9542	9231	4693	10940	8754	2898	2700
1767	10023	9726	4677	10805	8570	3065	2942
1768	9577	9001	4573	11522	9376	3044	2981
1769	9971	9474	4860	9700	8727	3254	3172
1770	10000	9549	4775	9922	8797	3531	3387

V.

Memoire ſur les Enfans qui naiſſent ſans un veritable Anus. Par M. Bertin. Vid. *l'Hiſtoire de l'Academie Royale des Sciences, Année* 1771. 4to. *à* Paris 1774.

M. Bertin's obſervations on the diſeaſe alluded to in the title, are preceded by ſeveral pertinent remarks on the helpleſs ſtate of new-born children, and on the abſolute neceſſity of attending to all their wants.

One of the moſt material cares due by a nurſe to a child, is to ſee that all the paſſages intended by nature, whether for the entrance or exit of the air and aliments, are free, and without any obſtruction; for, as many caſes occur, in which ſome of theſe are not altogether complete, if they are not ſoon either rendered ſo, or the deficiences, in ſome meaſure, at leaſt, ſupplied, ſuch children cannot be ſuppoſed long to ſurvive their birth.

Of all the different paſſages, none are found ſo liable to ſuch obſtructions as the anus, in which it

it is now well known they are far from being uncommon. This diſorder, our author alledges, may, and has happened, in four different manners, all of which require a different method of treatment.

1. The anus may be entirely obſtructed, either by a thin membrane, or a more fleſhy ſubſtance, merely ſtopping up the external paſſage.

2. The rectum is ſometimes wanting altogether; is ſometimes not perforated through its whole extent; and ſometimes terminates in one or two bags or culs-de-ſacs, before reaching the external teguments,

3. The rectum in girls ſometimes terminates in the vagina; and, on other occaſions, by a double opening, one in the vagina, and another at the uſual part, viz. the anus. It may end doubly too in another manner, viz. with one opening into the bladder, and another in the vagina.

4. In male children the rectum ſometimes terminates in the bladder, without having any other opening; and in them likewiſe may end doubly, viz. both in the bladder, and at the ordinary ſituation of the anus. In the firſt of theſe circumſtances, the diſorder in general is very eaſily got the better of; for, when the paſſage is only

covered by a thin membrane, the proper ſituation of the anus is at once evident, both to the eye and the feel, by the preſſure and blue colour occaſioned at the part by the meconium within. Mr Levret, in ſuch caſes, adviſes a circular inciſion of the membrane; but our author thinks, with Hildanus and Lamotte, that a ſimple inciſion is all that is requiſite; the wound being immediately waſhed with ſpirit of wine, and covered with dry charpee, without even having recourſe to tents. When, however, the obſtructing ſubſtance is of a more thick fleſhy nature, in place of one ſimple inciſion, two, three, or more may ſometimes be neceſſary; as it is much better to effectuate the opening ſafely, in a ſlow gradual manner, than run any riſk of wounding the bladder and other contiguous parts, by plunging the ſcalpel to the bottom of the obſtruction at once. In order farther to avoid the bladder too, we are adviſed to direct the courſe of the inciſions backwards, near to the direction of the os ſacrum. In ſuch caſes, where it is neceſſary to carry the opening to any conſiderable depth, either a tent, as deſcribed by Heiſter, muſt be introduced after the operation, or a cannula, as directed by Hildanus; as the ſides of

the

the wound would, without ſuch a precaution, be apt to coaleſce.

It ſometimes happens that, although their be an opening at the ordinary part, yet the paſſage is too ſtrait to allow a free exit to the meconium, and other excrements. This ſtate of the diſorder may be relieved in three different methods, either by diluting the fœces with frequent injections, ſo as to render their evacuation more eaſy; by dilating the opening with a tent or canula of a proper ſize; and, laſtly, if neither of theſe anſwer, by enlarging the opening with a ſcalpel. A caſe is here related from Roonhuyſen, wherein this laſt method was had recourſe to with ſucceſs.

The ſecond ſpecies of this diſorder enumerated by our author, is, as will be readily imagined, of a much more dangerous nature than the preceeding. Several inſtances of it are here related by Mr Bertin, taken from the memoirs of the academy of ſciences, and thoſe of the academy of ſurgery, as well as ſome other authentic publications.

It has been propoſed by Van Swieten and others, in ſuch deſperate caſes, wherein the rectum is altogether wanting, and when, at the ſame time, any attempts that have been made for the formation of an artificial anus have failed, that the abdo-

men of the child ſhould be opened, ſo that, in this manner, ſuch a paſſage for the fœces might be obtained, as has frequently been known to anſwer in very bad caſes of herniæ. Our author, however, is of opinion, that ſuch a dangerous and doubtful operation, ſhould in no caſe be had recourſe to, except it ſhould in ſome particular inſtances ſo happen, that nature ſhould point out the part proper for the opening, by the formation of a circumſcribed tumor occaſioned by the collection of meconium in the inteſtines; in which event, as the ſurgeon would then have a ſure guide for the direction of his inciſions, ſome operation of the kind propoſed might, he thinks, be attempted. But, in general, all that is adviſeable to be done, is, with a ſcalpel to make an opening of a proper ſize, at the uſual part where the anus terminates; and the inciſion being carried as deep as conveniently it can, a pharyngotom is then to be directed on the finger, and puſhed as far up as the operator judges can be done with ſafety; and its point being carried backwards towards the courſe of the os ſacrum, the bladder may in that way be avoided.

It ſometimes happens that, although there is an opening at the uſual part where the anus terminates,

nates, yet the paſſage is entirely obſtructed by the interference of ſome membrane or other ſubſtance, at the diſtance of two or more finger-breadths from the external opening. Such a caſe is here related, wherein, after the child's death, the inferior extremity of the colon was found about half an inch diſtant from the upper end of the rectum; ſo that thoſe two extremities of the two different inteſtines formed, as it were, two diſtinct *culs-de-ſacs*. Our author is of opinion, that children, in this ſituation, might frequently be ſaved by a trocar or pharyngotom being puſhed along the finger in a proper direction, ſo as to reach that part of the inteſtine containing the meconium; and in fact, we find an inſtance related in the memoires of the academy of ſurgery, tom. 1. page 385. of a child, who laboured under this ſpecies of the diſorder, being recovered by the means propoſed. The third ſpecies of the diſorder now under conſideration, ariſes, as was obſerved, from the rectum terminating in the vagina. It ſometimes ends by one ſingle opening in the vagina; and at other times doubly, with one opening in the vagina, and another at the ordinary ſituation of the anus. In this laſt caſe, if the two openings are large enough for the paſſage of the fœces, little or nothing is neceſſary to be done;

for

for any operation that could be had recourſe to, might produce fully greater inconveniences than can occur, even from a continuance of the diſorder. But, on the contrary, when the two paſſages are found inſufficient for the exit of the fœces, the opening at the anus ſhould be enlarged, either by means of tents or canulas of different ſizes; or, if theſe are found ineffectual, by the ſcalpel, as adviſed in the firſt ſpecies of the diſorder. When it ſo happens, that the rectum opens altogether into the vagina, and at the ſame time there is reaſon from appearances to imagine, that the gut could be eaſily got at by an inciſion upon the uſual ſituation of the anus, the operation, in ſuch a caſe, ſhould certainly be had recourſe to, as it may be a means, if not of curing the inconvenience altogether, at leaſt of rendering it more tolerable.

The fourth and laſt ſpecies of the complaint proceeds, as was obſerved, from the rectum terminating in the bladder. It cannot eaſily occur in girls, as in them the vagina interferes between the rectum and bladder; but ſeveral inſtances of it in boys are here related by our author. The inteſtine may terminate either altogether in the bladder, or by two different openings, one in the bladder, and one externally, at the uſual ſituation of the anus.

Both

Both ſpecies of the diſorder muſt be conſidered as exceedingly dangerous, it being impoſſible for the fœces to find a paſſage by the narrow canal of the urethra; and their being long retained in the bladder, muſt inevitably deſtroy the patient at laſt. It ſhould therefore be the firſt object with practitioners, in all ſuch caſes, if poſſible, to make a free opening for the paſſage of the fœces from the bladder. Although the opening from the inteſtine into the bladder, may not perhaps be within reach either of the eye or finger, yet this ſpecies of the diſorder is juſt as evidently characteriſed as any of the others, being always known to exiſt when the meconium and other excrements are paſſed by the urethra.

When an external opening takes place, together with the communication between the inteſtine and bladder, all that is neceſſary to be done, is to enlarge the former, through its whole extent, from the teguments to the gut itſelf, ſo as to make the paſſage for the fœces as free in that way as poſſible. And if that does not anſwer the purpoſe ſufficiently, the inciſion ſhould be carried into the poſterior part of the bladder, ſo as to allow a free exit, both for what has been collected in it, and for ſuch portions of the excrement as

may

may in future be emptied into it. The ſame ſteps become equally neceſſary when no opening occurs externally. An inciſion, to a proper depth, being previouſly made at the ordinary ſituation of the anus into this artificial opening, the finger is to be introduced, and a cutting inſtrument conveyed by it to the bladder. Whether a paſſage, ſo formed, between the bladder and rectum, will ever heal up or not, is uncertain; but, in ſuch a ſtate of the diſorder as no other reſourſe can afford any chance for the patient's recovery, it ought ſurely always to be put in practice. When the original paſſage between the bladder and rectum can be diſcovered by the finger, an enlargement of it may perhaps be preferable to any other; but when that cannot be done, an opening may either be made on the poſterior part of the bladder, by a biſtoury conducted on the finger, as already directed; or a ſtaff being introduced at the urethra, a paſſage may be formed for the fœces in the neck of the bladder, by an inciſion of nearly the ſame parts as are now uſually cut in the operation of lithotomy.

A caſe of this ſpecies of the diſorder that occurred to our author, is here circumſtantially related; and he regrets much his not having had recourſe to what, he is now convinced, might probably

probably have ſaved the child, viz. ſuch an opening into the bladder as above directed. There was no external opening; but, as the uſual ſituation of the anus was marked out by a remarkable violet colour, it was not doubted that the meconium was near at hand. On carrying the inciſion very deep, however, no appearance of the inteſtine could be obſerved; and, as the propriety of making an opening into the bladder did not at the time occur to the practitioners concerned, the child periſhed evidently by the excrements being too long retained in the bladder.

VI.

Caſes of retroverted Uterus, by Dr Garthſhore, *Mr* Hooper, *and Mr* Bird, *with Remarks on that diſeaſe, by Dr* Hunter. Vid. *Medical Obſervations and Inquiries by a Society of Phyſicians in London.* 8vo. London.

IN the volume of the London Medical Obſervations and Inquiries, lately publiſhed, are inſerted no leſs than five caſes of retroverted uterus, which, in the courſe of three or four years, had occurred to three practitioners in midwifery; one to Mr Bird ſurgeon at Chelmſford, two to Mr Joſeph Hooper, and two to Doc-

tor

tor Maxwell Garſhore. In the treatment of theſe ſeveral caſes, the directions laid down by Dr Hunter in the fourth volume of theſe obſervations, were, with very little alteration, purſued in all of them, and, by the aſſiſtance of the above named gentlemen, all the women did well. The reduction of the uterus being, in each, accompliſhed with more or leſs difficulty, according as the diſorder had been of longer or ſhorter duration. Whether or not any particular period of pregnancy is more liable than others to this diſorder, is perhaps as yet uncertain; it may however be remarked, that all the five women, in whom the caſes alluded to occurred, were either in the third, or between the third and fourth months.

Theſe caſes have perhaps, in ſome meaſure, led to the following remarks on the diſeaſe in queſtion, by Dr William Hunter.

The growing bulk of the uterus in the firſt months of pregnancy, before it riſes above the brim of the pelvis, has a natural tendency to produce micturition, dyſury, and ſuppreſſion of urine. The particular form and ſtate of the pelvis, in many inſtances, may contribute much to ſuch complaints, and even to the retroverſion itſelf in various degrees. The Doctor ſays *various degrees*, as

as he is convinced, by the caſes he has ſeen, as well as by the nature of the parts concerned, that, in different caſes of that kind, the axis of the uterus is thrown into different directions.

That pelvis which is moſt capacious below, and narroweſt above, will be the moſt diſpoſed to ſuch diſorders; and our author imagines, that very corpulent women will ſeldom or never have the complaint. When the lower part of the pelvis is very capacious, and eſpecially when there is little adeps to fill it up, the enlarged uterus, in the ſecond and third months, will occupy the lower part principally of the pelvis; it will preſs more upon the meatus urinae than upon the upper part of the bladder, and thereby diſpoſe the patient more to dyſury and ſuppreſſion. In conſequence of the laſt, ſhe will have more frequent calls and urgent bearings downwards.

In this ſtate, the complaint will take a very different turn in different caſes, as the influence of various cauſes, ſingly or in co-operation, may happen to direct. If the cauſes of the complaint exiſt in a leſs degree, which is moſt commonly the caſe, eſpecially when accompanied with favourable poſtures and motions of the body; and if the patient takes pains to keep the bladder tolerably

rably empty, nature will recover herſelf, and go on in her uſual courſe.

But, when the contrary happens, the uterus, increaſing daily, will at length be ſo jammed in the pelvis, as to bring the patient into a very painful and hazardous ſituation. Being kept down by the diſtended bladder which riſes over it, and urged frequently and powerfully downwards by the efforts of the patient, it is preſſed againſt the parietes, and eſpecially the lower parts of the pelvis. Where thoſe parietes are bony, it is reſtrained to the cavity of the pelvis; but, where fleſhy and yielding, it ſwells outwards, and forms projections, which fix it almoſt immoveably in that ſituation. In this diſtreſſing ſtate, the uterus may be, 1. Fully retroverted; or, 2. Half retroverted; or, 3. So far in its natural ſtate, that the orifice of the uterus ſhall be downwards.

1. One of the moſt uſual cauſes of the full retroverſion, we may ſuppoſe, is the diſtenſion of the bladder, which, as it riſes upwards into the abdomen, where it has room to expand, naturally tends to drag along with itſelf the cervix uteri, and the adjacent part of the vagina, to which it is fixed; thus the full retroverſion will be produced.

2. But,

2. But, when there is a coincidence of ſuch cauſes as, in ſome degree, obſtruct the revolution of the uterus, it will be only partially or half retroverted. This was actually the fact, in one of the caſes, communicated to the ſociety by Dr Garthſhore. There the fundus uteri was turned back ſo far only as to bring the orifice of the uterus cloſe to the inſide of the lower part of the ſymphyſis of the oſſa pubis.

3. And, when the cauſes above mentioned operate powerfully in keeping the uterus ſteady, it will be ſo little retroverted, that the orifice of the uterus will be puſhing out of the body as in a common procedentia. This was actually the caſe, we are told, in a woman whom the Doctor attended not long ago, along with Mr Combe. The water was at firſt very difficult to draw off; but the patient recovered, and did very well.

With reſpect to the treatment of this diſeaſe, experience, as far as can yet be judged, has only confirmed what was at firſt propoſed by Doctor Hunter, in a former volume of theſe obſervations. By ſome, indeed, it has been ſaid, that the retroverted uterus would, of itſelf, recover its natural ſituation, if, by the conſtant and proper uſe of

the catheter, the bladder were but kept moderately empty. In many, perhaps it might be ſo; it is our author's opinion, however, that, when it can be done with eaſe, (and, in moſt inſtances, it may), it would be better to put an end at once to pain and danger, by replacing the uterus. Practitioners know both how painful and how dangerous the ſituation of a patient is, whoſe urine cannot paſs but through the catheter. Beſides this, it is ſometimes ſo very difficult to inſinuate the catheter, that even expert operators fail. And, in moſt of thoſe caſes, the patient is liable to be without help at the proper times, and to be thereby expoſed to miſchief, perhaps, irreparable. If, in a ſhort ſpace of time, two women were known to have loſt their lives by this diſorder in London hoſpitals, where help is always at hand, muſt we not preſume that every woman is in danger who has a retroverted uterus? And, when we can eaſily at once remove her pain, and put her into a ſtate of ſecurity, can it be adviſeable to be paſſing the catheter for days and weeks together, till the uterus recovers itſelf, even if we could be ſure that this would happen?

VII.

VII.

The Caſe of a Hydrophobia, by Dr Fothergill, F. R. S. Vide *London Medical Obſervations and Inquiries*, vol. 5th, 8vo, London.

THE Ormſkirk medicine, which has been ſo long famous for the cure of perſons bit by mad dogs, has ſo generally, in this country, at leaſt, acquired ſuch a character, that to many, the ſtrongeſt and moſt convincing proofs of its inefficacy muſt be held forth, before they will be prevented from placing more dependence on it than there is now too much reaſon to ſuſpect it deſerves. The following caſe, however, ſeems to put the fallibility of the medicine beyond all manner of doubt.

Doctor Fothergill not having ſeen the patient, in whom the caſe alluded to occurred, till ſome days after the diſorder had begun to make its appearance, his account of the caſe during his attendance, is preceded by a ſtate of what had previouſly happened, while the patient was under the care of Mr French, his apothecary.

Mr Charles Bellamy of Holborn, aged forty years, on the 14th of February 1774, was bit by a cat, which was killed the ſame morning. The day after, viz. February 15th, he took the celebrated Ormſkirk medicine, ſold by Hill and Berry, in Hill-ſtreet Berkely-ſquare, and conformed to the directions given by the vender, in every reſpect. A ſervant maid, who was bit in the leg by the ſame cat, immediately before her maſter was bitten, likewiſe took the ſame remedy.

About the middle of April he complained of a pain in his right knee, which he ſuppoſed was affected with rheumatiſm; he had felt the like pain, at times, during the laſt two years, and had procured himſelf eaſe by pumping cold water on the part. On the 7th of June, his complaint increaſing, he deſired Mr French to attempt ſomething for his relief; and accordingly pills were ſent him, compoſed of calomel, ipecacuanha, and pill. ſaponac. Of theſe he was to take doſes, of a proper ſtrength, daily, together with Huxham's tincture of bark, and buckbean tea.

After having taken theſe medicines about ſix days, he diſcovered an unuſual titulation in the urethra, a contraction of the ſcrotum and penis,

to

to a degree of pain, and an emiſſion of ſemen, after making water, to which he had frequent calls. Alarmed at theſe ſymptoms, which he attributed to his medicines, he was deſired to diſcontinue them, and to live as temperately, in every reſpect, as poſſible.

On Thurſday the 16th of June, he ſent for Mr French in the morning, when he complained much of having had a reſtleſs night, and ſaid, that, though he had eat ſome bread and butter, as uſual, for breakfaſt, yet he found he could not ſwallow tea without difficulty. He attempted it then, by throwing a little into his mouth with the utmoſt agitation. Recollecting the accident of the bite, and apprehending the moſt ſerious conſequences, Mr French, without diſcovering his apprehenſions to the patient, propoſed that a phyſician might be ſent for. Doctor Fothergill was immediately called; and, as the patient's danger then appeared evident, a conſultation was deſired, and the Doctor accordingly met with Doctor Watſon, the perſon pitched upon, on the evening of the ſame day. In the mean time, ſix ounces of blood were ordered to be taken from the arm, a bolus of native cinnabar, and half a ſcruple of muſk, to be taken eve-

ry four hours, and as much fruit and other nouriſhment preſcribed, as the patient could eaſily get down, he, by that time, having found a good deal of difficulty in ſwallowing any thing liquid.

In the evening his countenance was pale, and he ſeemed much agitated and diſtreſſed, complained of extreme thirſt, and of the impoſſibility of ſwallowing any liquid. His tongue was white, but did not appear dry. He was perpetually endeavouring, with great efforts, to bring up and diſcharge a viſcid tenacious phlegm which lined the fauces. The heat of his body was moderate; but his pulſe was quick, hard, and irregular; and he had ſtrong palpitations of his heart. He was perfectly ſenſible; and, when his endeavours to diſcharge the viſcid phlegm would allow him to ſpeak, gave very pertinent anſwers. He had made but little urine ſince morning; the dragging, as he called it, of the ſcrotum, ſtill continued, and the uneaſy ſenſation and emiſſion. The blood which was taken in the morning, had ſome ſlight appearance of inflammation; the craſſamentum was firm, with ſlight traces of ſize, but the ſerum remarkably yellow. There had been no evacuation by ſtool ſince morning; and, upon the whole, it was evident, that, in that time, the diſorder

order had increaſed. On maturely conſidering the patient's hazardous ſituation, the following proceſs was agreed upon: A clyſter was ordered, with a view to procure a ſtool or two; and the patient afterwards to uſe the warm bath, for ſuch a time, and of ſuch a degree of heat, as was moſt agreeable to himſelf. At his return from the bath, frequent clyſters were given, of a pint of milk and water each; and in the laſt of theſe was to be exhibited a dram of Dover's powder. He was ordered to rub two drams of ſtrong mercurial unction into his legs and thighs, as ſoon as he came home from the bath, and he was deſired to get down all the ſuſtenance he could.

On the morning of the 17th, it was found, that the laxative clyſter had operated properly. The warm bath relieved him greatly while he was in it; ſo that, for a time, as he expreſſed it, his ſufferings were ſuſpended. They had returned, however, with more violence in the night; the clyſters had been repeated ſeveral times, and the unction applied. He had paſſed a moſt reſtleſs night, totally without ſleep, and in much agitation, not being able to lie ſtill a moment. His countenance beſpoke much diſtreſs, though accompanied with endeavours to conceal it; ſome-

times he was calm, then agitated, talked much, but ſenſibly. He had now a copious flow of ſaliva; his tongue white and moiſt, but foul. His pulſe very quick, ſmall, hard, and irregular; his hands rather cold than hot. He had made water in the night with leſs difficulty, and without its uſual conſequences. The dragging pain, or ſpaſmodic affection of the cremaſter, was gone off. In general, his ſtrength and faculties ſeemed leſs impaired than might have been expected, where ſo little ſuſtenance had been taken in, with conſtant reſtleſſneſs, and no ſleep.

On obſerving, therefore, that there was a more copious flow of ſaliva, the tongue more moiſt, the thirſt leſs, the ſpaſm of the cremaſter gone, yet that his difficulty in ſwallowing was not leſs, ſtill no ſleep, but his head ſtill clear; that his pulſe continued hard and quick; that there were ſome appearances of an inflammatory denſity the preceeding day; that he had found relief from the bath, it ſeemed proper to continue the former plan. It was now ordered that the patient ſhould be blooded ſtanding, according as his ſtrength could bear it: That he ſhould remain in the warm bath, for as long a ſpace as he found agreeable: That a clyſter of milk and water ſhould be thrown up at his return

turn from the bath, with a dram of Dover's powders, and half an ounce of mercurial unction rubbed in as ſoon thereafter as convenient. One ſcruple of extract. thebaic. was ordered to be made into twenty pills, three of theſe to be given when he came out of the bath, and two every hour till he ſeemed diſpoſed to ſleep. At five next morning his phyſicians viſited him again, when he received them with the utmoſt tranſport and joy; deſcribing, in very ſtrong terms, the pleaſure and benefit he received from the warm bath, and the hopes he now conceived of a ſpeedy recovery. A vaſt quantity of viſcid phlegm was continually flowing into his mouth, which he was as conſtantly employed in diſcharging; for it ſeemed to have the ſame effects on the organs of deglutition, as if he attempted to ſwallow any other liquor, and gave him extreme uneaſineſs. To get rid of this deſtuction, the moment he felt it in the fauces, he exerted a ſudden and vehement expiration, as if it were with a deſign to blow away the moiſture ſo offenſive to him, with the utmoſt force and expedition. This occaſioned a ſound, which did not ſeem very remote from the hollow barking of a dog. When he was not employed in theſe efforts, he

was

was talking conſtantly, but coherently. His eyes had a particular keenneſs, and all his motions were quick and vehement; his pulſe was alſo quick, hard, ſometimes trembling and irregular. His hands were rather cold and clammy; but the general heat of his body not intemperate. On inquiry, it was found, that all the nouriſhment he had taken, conſiſted of a few bits of bread, moiſtened with wine, a little pudding, and two or three pieces of China orange, which pleaſed him much. He had taken none of the pills.

On his deſiring to be ſhaved, every freſh application of the lather to his face, as likewiſe of the razor, made him fall back with ſurpriſe; and, in ſhort, every new movement about him gave him ſome freſh alarm, ſome degree of agitation and anxiety. Whilſt the patient was in the bath, the perſon attending, without any particular intention, took up ſome of the water in his hand, and poured it on the patient's head and face; this confuſed him much; and he afterwards deſcribed the diſtreſs it gave him very emphatically; and added, with much apparent ſatisfaction, that he had ſo far conquered his averſion to it, that he had poured water on himſelf, with his own hand, in the ſame manner. In ſpeaking of this affair

fair he mentioned the term *Hydrophobia*; obſerving, that his complaints reſembled it; yet without giving any reaſon to apprehend he had the leaſt idea of his actually labouring under this diſtemper. He had not ſlept a moment from the time he was ſeized with the dread of liquids. He repeatedly expreſſed the ſatisfaction he received from the bath, and wiſhed to go into it again. His phyſicians conſented, and deſired that he might be carried thither again, and that he might ſtay in it as long as he choſe.

Every new operation now became an extreme difficulty to him; ſuch as dreſſing and undreſſing at the bath, and going into the water, which he now did with much entreaty, puting one foot in, and haſtily withdrawing it. He was at length prevailed to go into it. A recollection of the eaſe he had enjoyed in it before, aided by a manly reſolution that never forſook him, ſubdued his fears, and he remained in it near half an hour. He was brought home about nine o'clock. He refuſed to take the pills, and every other preſcription. He grew fretful and reſtleſs; ſoon became delirious, but offered no violence. After remaining in this condition about two hours, the powers of nature ſunk;

ſunk; he reclined his head gently on the pillow, and expired.

Endeavours were uſed to obſerve the condition of the part that was bit, when he was dreſſing after bathing, as far as could be done without alarming him; but without effect. After death, it was examined minutely, but without perceiving the leaſt morbid appearance. In the courſe of attendance, it was found out, that the ſore occaſioned by the bite of the cat ſoon healed, and the patient never afterwards thought more of it. Perhaps fortunately for the girl who was bit at the ſame time, her leg did not heal; it grew worſe, and baffled the ſkill of a young ſurgeon to whom ſhe applied. It is ſince known, that her leg continued long ſore, as likewiſe that ſhe was perfectly well on the 29th of Auguſt, being more than two months after the death of her maſter.

After this detail of the patient's caſe, Doctor Fothergill concludes this paper with ſeveral obſervations on the treatment of perſons bit by mad dogs; and, in an after-part of the ſame volume, is inſerted another paper by Doctor Fothergill, containing a variety of remarks on the ſame ſubject. His obſervations are, that the practice of immerſion

in

in ſalt water, as a preſervative from the hydrophobia, was begun on falſe principles, has been continued through cuſtom, and has now, from many inſtances, been found inſufficient: That the Ormſkirk medicine has likewiſe failed: That mercurials are alſo, as preſervatives, ineffectual; That neither the pulvis antilyſſus of our very eminent countryman, nor the Tonquin medicine, are altogether to be relied on as certain prophylactics. It ſeems therefore neceſſary, the Doctor obſerves, to withdraw the public confidence as much as poſſible from ſuch uncertainties, and to urge the trial of one, which if uſed ſpeedily and effectually, promiſes much ſecurity, and is ſtrongly recommended by long and extenſive experience. The practice here alluded to, and recommended by our author, is that of keeping the wounds occaſioned by the bite of mad animals open as long as poſſible. The caſe above related of the girl eſcaping who was bit by the ſame animal, and at the ſame time with another perſon who died, tends greatly to the ſupport of what is here adviſed; the only material difference in the treatment of theſe two caſes, having been the ſores in the girl's legs having been kept open for a conſiderable time, while thoſe on her maſter's healed very

very ſoon. Divers other caſes, we are told, have been related to the Doctor, of perſons eſcaping the fatal conſequences of this bite, by the continued running of the ſore; it ought therefore, he obſerves, to be the firſt buſineſs of thoſe who have the care of ſuch perſons, to purſue the directions of Celſus, who adviſes practitioners to burn the part, when it can be done with ſafety, and to promote a diſcharge from the wound as long and as copiouſly as poſſible. In timid ſubjects, who will not admit of the uſe of either the actual cautery or knife, for enlarging ſuch wounds, Doctor Fothergill propoſes to fill the wounds made by the bite with gun-powder, which being ſet on fire, the exploſion thereby occaſioned, may not only be of ſervice by enlarging and keeping open the ſores, but may likewiſe be a means of actually deſtroying the infectious matter communicated by the different bites. This, we are told, is a practice in ſome of the warmer countries of Europe, where venomous animals are more frequent than with us, and where the method here recommended is more eaſily and conveniently had recourſe to, than any other, by huntſmen, who are much expoſed to the bites of ſuch creatures. In very tender

ſubjects,

ſubjects, the Doctor obſerves, the application of a bliſter to the part might probably be of uſe; and this might be kept open, for ſuch a length of time as the ſecurity of the patient might ſeem to require.

VIII.

A remarkable Caſe of the ſoftneſs of the Bones, by Mr Henry Thompſon, *Surgeon to the London Hoſpital.* Vide *Medical Obſervations and Inquiries, by a Society of Phyſicians in London.* Vol. 5th, 8vo, London.

SEVERAL inſtances are now upon record, of the bones, even in the living body, having acquired a great degree of ſoftneſs; and of theſe, the following is, perhaps, none of the leaſt remarkable.

The patient, who was the ſubject of the caſe here related by Mr Thompſon, was a ſhoemaker in Wapping, aged thirty-three years, five feet ſeven inches high. He enjoyed good health till the year 1766, when he was ſeized with violent pains in his

his knees and feet, and was tormented with a head-ach, which came on at irregular periods. For theſe pains, which were conſidered as rheumatic, a variety of remedies were had recourſe to without any effect.

In November 1768, by a fall in his ſhop, the patient fancied he had ſprained his knee; this injury confined him to bed about a week, and he was afterwards unable to walk without the ſupport, both of a perſon's arm and a crutch-ſtick. On the 21ſt of December following, on endeavouring to go up ſtairs to bed, he ſtruck the toe of his right foot upon the edge of a ſtep, and inſtantly cried out that his thigh was broke. The following day Mr Thompſon, on examination, found a fracture of the thigh-bone, near its upper extremity. The reduction was effected with very little extenſion; but the pain, which before was conſiderable, was not thereby ſo much diminiſhed as might have been expected. About the end of five weeks from the time the bone had been replaced, the apparatus made uſe of for its retention was all taken off, with a view to obſerve how far the union had taken place. In the courſe of this examination, Mr Thompſon was ſurpriſed to find the thigh-bone yield and fall in, about

about a hand-breadth above the knee, ſimilar to what occurs in a fracture, excepting, that in this caſe, there was no ſenſation of grating, as is uſual, when the broken bone is of a ſolid texture. No violence whatever had been uſed, the leg having been merely lifted by one hand put below the ham, while another embraced it a little above the ancle. The operator, however, was ſtill more aſtoniſhed, on turning to the aſſiſtant who held the leg, when he obſerved a ſimilar ſeparation of the *tibia* and *fibula* had taken place, about a hand-breadth below the tuberoſity in the os femoris. Both theſe ſeparations were unaccompanied with any remarkable ſigns of additional pain to the patient.

Upon examining the patient, with a view to the diſcovery of the cauſe of ſuch a miſerable ſtate as he was now in, he acknowledged his having laboured under the venereal diſeaſe for upwards of eight years; that he had ſcorbutic blotches upon him for ſome years, and that he even then had a gleet. Mr Thompſon, from the appearance of the eruptions, being convinced of their being venereal, put the patient immediately under a mercurial courſe, ordering a dram of ſtrong unction to be rubbed in every night.

On examining the fiſſure occaſioned in the leg, a regular tranſverſe cleft was perceived in the tibia, without any appearance, however, either of ecchymoſis or tumefaction. And as, on tracing the ſurface of the tibia below the fiſſure, a remarkable ſoftneſs and yielding of the bone was diſcovered, ſimilar to a fluid being contained in it, Mr Thompſon, in order to diſcover the cauſe of ſo uncommon a feel, made two inciſions parallel to one another, and about five inches in length, through the ſkin, along the ſpine of the tibia, and then removed the intermediate portion of the teguments, clear from the perioſteum, which was very thin. Finding that the external part of the bone was very pliant and yielding, the ſcalpel was paſſed through it, and the denuded part all removed with the greateſt eaſe, its texture being only about the ſolidity and thickneſs of the rind of cheeſe. This being done, a duſky red, or liver-coloured fleſh, was found occupying the whole internal part of the bone, devoid of ſenſibility, and from which the oſſeous covering had been removed without the leaſt haemorrhage; in ſhort, it appeared an unorganized maſs, ſimilar to the fleſh-like ſubſtance or coagulum which may be formed

formed upon a ſtick or feather, by ſtirring freſh drawn blood in a baſon,

By the mercury being continued a proper time, the pains in his limbs were alleviated; the wound in the leg healed kindly; the erruption on the ſkin gradually diſappeared; and, upon the whole, his health ſeemed much amended. The mollities oſſium, however, ſtill continued to gain ground, the left tibia becoming ſoft in the ſame manner the right had formerly done; that leg and thigh, of courſe, loſt its ſtraightneſs, and became deformed, as the other had done before. In proportion as this contraction and deformity took place, the patient gradually loſt all ſenſe of muſcular action; but, when it became neceſſary to ſmooth the ſheet under him, he was very ſenſible of pain, upon lifting up and laying down the limbs. His appetite remained good the whole time of his confinement, till within three week of his death. As he was ſometimes coſtive, laxatives were neceſſary. His urine, for the firſt two years, generally depoſited a whitiſh ſediment, which, upon evaporation, became like mortar; and he voided three or four ſmall jagged ſtones, ſome time after a complaint in his loins. He was at laſt carried off by a lientery on the 18th of February

1775, after a confinement to bed of above ſix years.

Doctor Hunter aſſiſted at opening the body: The ribs and ſternum were found to have loſt all their ſolidity, being eaſily cut through with a common ſcalpel. The cartilages of the ribs were unaltered; the contents of the thorax and abdomen appeared in a healthy ſtate, and were no otherwiſe affected than by ſituation, owing to the deformity of what originally formed the bony ſupports of the thorax, the ſpine, and pelvis. The gall-bladder, however, was deſtitute of bile, greatly contracted, and contained a conſiderable number of very ſmall black jagged ſtones, reſembling coal duſt. The ſtate of every bone in the body was afterwards looked into; and the reſult was, that the knife could eaſily be paſſed through thoſe of the cranium, ſternum, ribs, vertebrae, pelvis, and all the cylindrical bones which formed the extremities; and the phalanges of the fingers were even ſo much altered, that they were capable of being ſlit through longitudinally. All theſe originally bony parts conſiſted of a mere cortical or outſide oſſeous covering, of the thickneſs of rind of cheeſe, and of an inſide fleſh-coloured maſs. The cartilaginous coverings of the epiphyſes

epiphyſes of the bones of the extremities appeared to have loſt much of their original thickneſs. In many parts of the epiphyſes, it appeared as if this cartilaginous covering was in a manner annihilated, whilſt, in other parts, it appeared prominent and full of bumps. The epiphyſes were equally compreſſible and ſpringy to the touch as the diaphyſes of the ſame bones; and, although there was an apparent diminution of cartilaginous covering, yet it by no means appeared to be abraded, ſince what remained preſerved its pearly colour and ſmooth poliſh; and it is remarkable, that though the joints of the lower extremities in particular, had been deſtitute of motion above ſix years, the ſynovia was perfectly good, and in great quantity. It may farther be added, that the muſcular parts, in general, but more particularly of the lower extremities, were exceedingly pale, having loſt the appearance of fleſh; and, it would ſcarcely have been poſſible to have traced them by diſſection, from their contortion and adheſion to each other.

IX.

An Account of an Aſthma from an uncommon Cauſe, by Dr Ruſh *of Philadelphia.* Vid. *Medical Obſervations and Inquiries,* Vol. V. 8vo, London.

IN the month of July 1771, a gentleman, newly recovered from a fever, was ſuddenly ſeized with a hiccough after drinking a glaſs of claret. This troubleſome ſymptom, after eight or ten days continuance, at laſt gave way to ſome antiſpaſmodic medicines; and no complaint now remained, farther than a ſlight hoarſeneſs, together with ſome little defluxion on the trachea. To remove theſe, as they were ſuppoſed to proceed from a want of tone, gentle exerciſe, with a free diet, was preſcribed, but to no purpoſe; the hoarſeneſs ſtill continued, and at times was complicated with a little difficulty in breathing. A bliſter, applied round his neck, relieved him greatly; and, a day or two thereafter, a gentle puke carried off the difficulty of breathing entirely. This interval, however, was but of ſhort duration. The night but one after taking the vomit,

vomit, he waked ſuddenly out of his ſleep about eleven o'clock with a violent aſthma. To relieve this, he got a grain or two of tartar emetic, with forty drops of laudanum, which puked him twice, and afterwards eaſed him ſo much, that he ſlept the remaining part of the night tolerably well. The following night, at eleven o'clock, he had another attack ſimilar to the former, and was again relieved by the ſame medicines. After this, he never enjoyed a complete intermiſſion of this diſorder. He had a conſtant orthopnoea, and breathed ſo loud as to be heard at a conſiderable diſtance. His abdomen was drawn more inwards than is natural, at each inſpiration; but the muſcles that move the ſcapula were never obſerved in action. He frequently threw his head back to get breath, and then always made a deep inſpiration. His lungs ſeemed free from any complaint: He felt no pain in his breaſt; and, when a little relieved from the difficulty of breathing, could lie with equal eaſe on either ſide. His belly was natural; his urine in ſmall quantity; and his pulſe quick, though regular, till within four days or ſo of his death, at which time it intermitted after every fourth or fifth ſtroke. His eyes were dull and watery; and he frequently

complained of a dizzineſs, but never of the leaſt pain in his head, or of any defect in viſion. He coughed much towards the cloſe of the diſorder, and diſcharged a large quantity of viſcid purulent matter, without any relief however to his complaints.

He frequently put his hand to his throat, and ſometimes felt a pricking pain below the cricoid cartilage, on the left ſide of the trachea; and as, on inquiring, he acknowledged his having at times felt a ſlight difficulty in ſwallowing, theſe ſymptoms, we are told, determined Doctor Ruſh as to the cauſe and ſeat of the diſorder: For, having lately peruſed *Morgagni de cauſis et ſedibus morborum*, he found, in letter xv. articles 13th and 15th, two caſes which reſembled this in ſo many particulars, that he was under no heſitation in declaring the diſeaſe to ariſe from ſome kind of tumour compreſſing the windpipe. Diſcutient applications were ordered to the throat; and the caſe being now conſidered as alarming, other two phyſicians were called in, who both agreed as to what had been ſuſpected for the ſeat of the diſeaſe. There was no ſwelling or appearance outwardly, to direct either to the ſeat, depth, or nature of the tumor which compreſſed the windpipe; but

but ſome blood was ordered to be drawn by means of a cupping-glaſs, as near as poſſible to the part where he had felt the pricking pain. A bliſter was applied round the throat, and another ſoon after below the left ear. He got ſome doſes of calomel. Baths and cordials were freely adminiſtered, together with diſcutient gargles; but all to no purpoſe. The patient died on the thirteenth day from the attack of the aſthma. On opening the thorax after death, the lungs were found inflated with air, but in no reſpect either diſeaſed, or adhering to the pleura; and there was no water in the cavity of the thorax, and not above an ounce and half in the pericardium.

On diſſecting the windpipe from the neighbouring parts, a tumour, about the ſize of an Engliſh walnut, was obſerved on the left ſide, near an inch below the cricoid cartilage, ſeated partly on the trachea, and partly on the oeſophagus. On cutting into this tumour, which was of a ſubſtance between fleſh and cartilage, about a tea ſpoonful of dark-coloured matter burſt out, which had a moſt foetid ſmell. The matter laid upon the trachea itſelf, and was lodged in a ſinus which extended near two inches above the ſeat of the tumour.

tumour. It was evident that the tumour had been the cauſe of the patient's death; but it was likewiſe obvious, that no operation could have been put in practice for his relief: For, to ſay nothing of the uncertainty of the ſituation of the ſwelling, there would have been a riſk of wounding the carotid artery, which lay contiguous to it. Even bronchotomy itſelf, if performed above the tumour, would have afforded no relief; and, if below it, would only have prolonged the patient's miſery.

Dr Ruſh concludes this paper by obſerving, that the ſymptoms, which occurred in this patient's diſorder, ſhould lead us to inquire into the ſtate of the trachea more frequently in a hoarſeneſs. And although, in the preſent caſe, the tumour lay beyond the reach of medicine and the knife, yet ſuch ſwellings may occur in practice as will yield to one, or to both of them; and, if they ſhould not, the phyſician may at leaſt ſave his credit, by pronouncing the diſorder to be incurable.

SECT.

SECT. II.

Medical Obſervations.

I.

The Hiſtory of a caſe of the Morbus Niger, with ſome Remarks on the effects of Camphor. By Dr Henry Marcard, *Phyſician at* Hannover.

A Woman of a very deformed crooked ſhape, about 48 years of age, had complained, many years ago, of very ſevere pains about her ſtomach, attacking by intervals, and commonly accompanied with belching, and a rejection of the food, or, if ſhe had taken none, of an inſipid lymph. The diſorder was allowed to be of the hyſteric kind, and treated as ſuch, there being no apparent reaſon to impute it to any other cauſe.

On

On the 16th of February 1773, when I was called for, I was told that ſhe was then attacked with thoſe pains, to a degree never before experienced; that ſhe had vomited up ſome black ſtuff like coagulated blood. I found no fever; ſhe had great nauſea; her tongue was not at all furred; ſhe had moſt excrutiating pains in the hypogaſtric region, and was much affected with anxiety.

I ſhould have given her a vomit; but durſt not venture upon it, from the apprehenſion that the rejection of the black matter might be a ſort of vomitus cruentus, as it afterwards proved not to be; and beſides, as it would have been againſt the common rule, *Gibboſis nulla ſunt exhibenda vomitoria;* which, by the bye, is a principle, I think, far too generally pronounced; and there is no doubt this very woman might have taken a vomit with great ſafety, as ſhe brought forth, notwithſtanding her irregular ſhape, and even the apparent deformity of her pelvis, ſix healthy children, then all alive.

Thinking, however, ſome evacuation proper, I ordered ſomething to open the body, and the emplaſtrum de hyoſciamo to be laid over her belly.

ly. The following day ſhe was remarkably better, and continued ſo all the 18th.

On the 19th, at once, aroſe a ſevere fever; the pains in the region of the ſtomach became intolerable; ſhe was conſtantly vomiting, without bringing up any thing particular, and had no ſtools.

I ordered ten ounces of blood to be taken away; frequent clyſters, compoſed of emollient and ſalt, to be given; a bladder with warm water to be laid upon her ſtomach, and a mixture of lemon juice and *ſal abſynthii* to be taken ſeveral times during the effervescence. Towards night I found the heat abated; ſhe vomited only by intervals of an hour, and the clyſters brought away, now and then, ſomewhat more of the coagulated blood, as the friends of the patient ſtiled it, which they had omitted to keep for my examination.

On the 21ſt, in the afternoon, I was told that the patient was in a dying condition, the pains being augmented to ſuch a degree, as to produce convulſions and a cold ſweat.

I own I was now quite at a loſs what to do, being entirely ignorant from what cauſe theſe heavy ſymptoms could riſe. And though I ſuſpected the black ſtuff might be the origin, yet I knew ſo little about its nature, that even that could

could give me no directions at all. I reſolved at laſt to preſcribe three grains of camphor every four hours, in an emulſion, with ſome nitre, and a good deal of ſyrup of white popies, and to order a large bliſter upon the part affected. On the ſame night, about eight o'clock, I was called again, and was told that the patient, not long after having taken the emulſion, began to vomit in a moſt ſhocking manner; and that the people about her really believed ſhe puked moſt part of her guts away, ſuch ſtrange matters as they thought were to be obſerved in what ſhe threw up. Before my arrival, the vomiting had ceaſed; but a large quantity, at leaſt ſixteen ounces, of the black ſtuff was collected for my examination. Upon inquiry, I found it to be a matter ſomewhat like poultice, but leſs adherent; it was quite black, neither inclining to the red nor to the yellow, being neither blood nor gall. I put a little of it upon white paper; and, after it was rubbed upon the paper, it went clear off from the ſheet without colouring it, or leaving any mark behind beſides moiſture. The patient ſaid, that it had no particular taſte. I have never ſeen any matter more reſembling this, than the contents of a *tumor cyſticus*, an *atheroma*, which I found once in

the

the dead body of an old man, juſt under the ſpleen,

The patient was much relieved by this evacuation, though ſhe became extremely weak; ſhe recovered very ſlowly, but did never vomit again. As often as ſhe complained of nauſea and pains, I ordered her purgatives and clyſters, and heard that they frequently brought off ſomewhat more of the black matter, with apparent relief. She fell afterwards into a ſlight fever, and ſome other little complaints, of which it is unneceſſary to give any particular account; but, after two months from the beginning of her illneſs, ſhe was intirely recovered, and had never again an attack of her old complaint, the pains.

I do not pretend to determine whether this ſtuff came from the ſpleen, by means of the *vaſa brevia*, or whether, perhaps, a *tumor cyſticus* near the ſtomach furniſhed the matter. This caſe *may* probably fall under that ſpecies *morbi nigri Hippocratis*, whereof he ſays: *Aeger vigium vomit reluti foecem*; but is not to be determined, as he gives no further deſcription of that ſpecies.

I ſhall forbear mentioning any authors who have ſeen ſimilar caſes that proved, I find, commonly fatal. One obſervation, however, I cannot help adding, concerning the effect of camphor in

in the preſent caſe. All the *vires vitae* ſeemed to have undergone a very hard ſtruggle by the time that I reſolved to try the effect of camphor, and, ſoon after it was taken, all was brought about.

Not long ago, I have ſeen an effect of camphor pretty much reſembling this one. A woman was taken ill of a pleuriſy of the bilious kind. After about ſeven days, the pleuritic ſymptoms diſappeared, and the remaining diſorder was, as far as I could gueſs, merely bilious. Beſides acids, I ordered frequent purgatives, and gave them as ſtrong as I durſt venture upon. They had always the deſired effect, cauſing ſome ſtools every day; but there was no change to the better; ſhe rather became weaker and weaker. I, however, continued for ſome days in the ſame way. On the 15th day of her illneſs, I found the patient very low; ſhe could not well ſit in her bed; her pulſe was hardly to be felt; though ſhe was not light headed, ſhe could neither think nor ſpeak without great difficulty.

I thought it now neceſſary to try another way, and gave her four grains of camphor, to be taken in four pills, every third hour; and beſides, ordered

ordered ſome wine. Upon my calling again at night, the huſband of the patient told me that theſe few pills had proved very efficacious; and, upon inquiry, I was not a little ſurpriſed to find, that, after the firſt doſe, the patient had ſix ſtools of green viſcous ſtinking excrements; and that, after the ſecond doſe, there followed three more; after which ſhe found herſelf a little better. From that time ſhe began to mend; ſhe recovered afterwards, but extremely ſlowly.

As camphor has neither faculties to effect vomiting nor purging, it is ſomewhat difficult to diſcover what cauſe the effects could be derived from, which it exerted in theſe two caſes. Nor ſhall I preſume to determine whether it acted thus, by adding to the ſtimulus of the morbid matter, or by adding to the irritability of the parts, or rather by ſupporting the *vires totius corporis*: Be that as it may, this concluſion ſeems very obvious, that camphor might prove many times an excellent remedy when the patient grows weak, whilſt nature intends a ſalutary evacuation; though certainly the effects can never be ſo evident when the evacuation is to come from other excretory organs than the *primae viae*; when the

morbid matter is to be eliminated by inſenſible perſpiration, by urine, ſweat, or eruptions.

II.

Caſe of the Puncture of a Nerve in Phlebotomy, communicated to Dr Andrew Duncan, *Phyſician in Edinburgh. By Mr* John Shetwen, *Surgeon,* Enfield, Middleſex.

HOWEVER eaſy and trifling the operation of bleeding appears, yet it is well known to be often ſucceeded by the moſt ſerious and alarming conſequences; and ſome of theſe, in all probability, as often happen under the hands of the moſt ſkilful as of the moſt ignorant and illiterate operator. Hitherto, when no particular bad habit could account for it, the inflamed and painful ſymptoms which follow bleeding, have been pretty generally aſcribed to the puncture of a tendon or ſubcutaneous nerve; but, lately, Mr John Hunter, whoſe ſkill in his profeſſion is juſtly celebrated, has advanced a contrary doctrine. He rejects the commonly received opinions, and ſuppoſes, that an inflammation attacks the cavity of

the vein in conſequence of its having been expoſed to the external air, which is well known to all experienced practitioners, to be injurious to other cavities when expoſed to its influence; and which, no doubt, as Mr Hunter obſerves, may ſometimes be the conſequence of bleeding. But I am very far from thinking, with him, that, moſt commonly, the inflamed or painful ſymptoms proceed from this cauſe, or that the nerves which are liable to be wounded in veneſection, are ſmall and unimportant: Small indeed they may be, but as to their being unimportant, that does not ſo readily follow; for every perſon who has paid proper attention to the phaenomena which belong to the nervous ſyſtem muſt know, that the ſmalleſt fibre of a nerve when injured, under certain circumſtances, will communicate irritation from one branch to another, in a moſt extraordinary manner.

I believe the painful ſymptoms much oftener ariſe from the partial diviſion of a nerve than from any other cauſe; and I think it a circumſtance of conſequence in practice, to be convinced of this matter; which will appear from the following caſe which lately fell under my care, and which demonſtrates that ſometimes, at leaſt, if not much

oftener than Mr Hunter ſuppoſes, the puncture of a nerve in phlebotomy may be attended with the moſt dangerous and alarming ſymptoms.

Suſan —— a maid-ſervant, in the family of W. Bridgen, Eſq; a young woman of a plethoric habit of body, was blooded, to the amount of twelve ounces, on the 14th of laſt April, for a little heavineſs in her head; ſhe was, in other reſpects, in good health. The vein bled freely, without any particular circumſtance being noticed, except a ſmarting of the orifice.

April 15. This day the patient took a doſe of phyſic, for the ſame cauſe for which ſhe had been blooded. The orifice had bled again, to the amount of ſix or eight ounces, and continued to ſmart a good deal; in conſequence of which, a ſmall piece of the emplaſtrum commune was applied to it.

16. The orifice ſtill continued to be uneaſy, and a pledgit of ſoft cerate was made uſe of, inſtead of the dyachilon.

17. Still the ſmarting and uneaſineſs continued, and ſhe now, I think, for the firſt time, mentioned her feeling a tingling pain ſhooting from the oriſice to her hand. As there was difficulty in procuring

procuring a better application, I made uſe of a cataplaſm of bread and butter; and deſired my patient to give her arm as much reſt as poſſible.

18. On this day the orifice was very ſore and tender; the tingling from the orifice to the hand was more painful, and extended upwards, towards the ſhoulder. I now ordered a fomentation and lintſeed cataplaſm, and the arm to be kept very quiet.

19. The pain and ſoreneſs of the orifice was much increaſed, and alſo the tingling pain from the orifice to the hand and ſhoulder: She had alſo a circumſcribed pain on the lower part of the right pectoral muſcle, with ſome redneſs and inflammation of the part, which was ſore to the touch. The fomentation and cataplaſm had both been neglected, and only the poultice of bread and butter made uſe of; and the girl was ſtill under a neceſſity of doing the work of the houſe.

20. The fomentation and cataplaſm had ſtill been neglected, the patient having been informed that it would occaſion a humour in her arm. This day, however, ſhe ſubmitted to be fomented, and a poultice of lintſeed was ordered to be applied twice a day; ſhe was enjoined a ſtrict antiphlogiſtic regimen, and the arm was put into a

ſling; but ſhe was often obliged to take it out of the ſling, as ſhe was ſtill under the neceſſity of doing the work of the houſe, which ſhe performed with exquiſite pain. The arm was much worſe on the evening of this day than it was before; and there was now an appearance of eryſipelas or efflorescence on different parts of it above the orifice. The pain now extended not only to the hand and ſhoulder, but up the neck, and was violent in the inflamed place on the pectoral muſcle. The patient felt a numbneſs all over her arm. The orifice, though exquiſitely tender, did not appear to be elevated or much inflamed.

Beſides the applications already mentioned, the hand, arm, and ſhoulder, and the pectoral muſcle were anointed with this liniment,

℞. Camph. ʒi.
Spt. v. r. q. ſ.
Ungt. ex. alth. ʒiſs.
Ol. e mucilagin. ʒſs.
Balſam. anodyn. ʒſs. m. f. lin.

21. The ſymptoms to day were much the ſame, or a little increaſed, and were attended with ſome involuntary convulſive catchings in the arm. The ſame applications, and the ſame regimen were continued.

22. The

22. The appearances much the ſame.

23. The ſymptoms were this day much increaſed; ſhe had now a pain and ſtiffneſs in her temples, and uneaſineſs when ſhe opened her mouth wide, her jaws, to uſe her own expreſſion, feeling as if tied with ſtrings; when ſhe breathed deep, the pain on the pectoral muſcle was acute. The fomentation and poultice were ſtill continued, although they ſeemed to give little or no relief. A trifling diſcharge from the orifice had laſt night given ſome little eaſe, but it was not permanent; and, upon examining the orifice with a probe, there was no appearance of matter or any ichor that could be diſcharged. The patient ſaid ſhe felt as though ſtrings were pulling and drawing her in different parts of her arm, and from the arm to the inflamed part on the pectoral muſcle.

As the ſymptoms had now plainly indicated a nerve to be injured, the moſt likely means of giving relief was undoubtedly by enlarging the orifice; but this, for many reaſons, could not be practiſed. I was therefore willing to try how far the ſedative virtue of opium would be efficacious, in allaying the painful and troubleſome ſymptoms. I gave twenty drops of tinctura the-

baica, and ordered half that quantity to be repeated every two hours, till it procured eaſe, or induced an inclination to ſleep.

24. The tinctura thebaica had yeſterday evidently exaſperated all the ſymptoms, nor had it procured even a temporary mitigation of the pain, though it was taken in larger and more frequent doſes than I had recommended; it occaſioned ſome degree of ſtupor, but gave no eaſe; the internal uſe of it was therefore declined; but a large doſſil of lint was made wet with tinctura thebaica and applied to the orifice, and it was repeated two or three times when it became dry. The whole arm was bathed with oil and tinctura thebaica, previous to the application of the linſeed cataplaſm.

25. The pain was this day much increaſed, and ſhe had frequent convulſive catchings in her arm. The orifice was, if poſſible, more tender than it had yet been; but there was no great teſion about it, nor was there the ſmalleſt appearance of ſuppuration; but there was a good deal of rigidity both above and below the oriſce. The fomentation was ſtill continued twice a day, ſometimes for three hours at once. The linſeed cataplaſm was now applied over the whole arm,

rom

from the hand to the ſhoulder, and the limb was kept conſtantly at reſt.

26. Notwithſtanding the great care and diligence with which the fomentation and cataplaſm had been applied, the ſymptoms kept ſtill increaſing. Bark was now recommended by a gentleman of long and extenſive practice, from a ſuppoſition that it might be productive of ſuppuration in ſome part of the arm. One ſcruple of the powder was given every two hours.

27. The ſymptoms were this day much the ſame as yeſterday; but, if there was any change, it was for the worſe. The fomentation and poultice were ſtill continued. In private practice it is often difficult to act agreeably to one's own judgment, as it is often neceſſary to pay attention to the prejudices of people who are unacquainted with the nature of the attending circumſtances. The preſent caſe afforded an inſtance of this; for, as it was preſumable that the injury proceeded from the wound made by the lancet, it was not an eaſy matter to convey an idea, that the enlargement of a wound which had already done ſo much miſchief, could be proper. The enlargement, however, was agreed to, from the hopes of its procuring a diſcharge of matter. I

lengthened

lengthened the orifice each way, and made a crucial inciſion upon it. Some ſlight relief was obtained for a few minutes, whilſt the blood trickled from the wound into the warm fomentation. The bark was this day continued more freely than yeſterday.

28. This morning I found every ſymptom very much exaſperated; the bark was therefore laid aſide, and two large leeches were applied to the edge of the orifice. Theſe drew away much blood, and ſeemed to give ſome trifling relief, which was, however, ſoon followed by increaſed pain, and drawing of ſtrings, to uſe the patient's own words. Her appetite for food had now been gone for ſome days; her tongue was loaded, and her pulſe feveriſh: She was now ordered to take one ſcruple of nitre every two hours, in a cup of barley water, with manna diſſolved in it.

After uſing the warm fomentation this morning, the eryſipelatous appearance on the arm increaſed rapidly, and there was much tenſion, though not the ſmalleſt mark of ſuppuration. A perſon who had ſeen a cataplaſm of oat-meal, vinegar, and oil, applied with extraordinary benefit to an inflamed arm, which put on a ſimilar appearance to this, though from a different cauſe, viz.

viz. a puncture of a bramble, recommended the ſame application, which was accordingly uſed; but in the evening the eryſipelas was greatly exaſperated by it, and all the other ſymptoms were increaſed. This evening I took ſeven or eight ounces of blood from the back of the ſame hand, which unloaded the veſſels, and gave more relief than any thing that had yet been tried; this relief however was tranſient. The patient now declaring that the fomentation and poultice had conſtantly done harm, they were left off, and the arm was wrapped up with ſlips of cloth ſpread with the unguent. flor. ſambuc. except the orifice, to which a ſmall lintſeed cataplaſm was ſtill applied.

29. This day the eryſipelatous appearance was a little abated; but the catchings, and other ſymptoms which threatened convulſion, were increaſed. I opened a vein again in the back of the hand; but was not able to procure a plentiful diſcharge of blood. Two or three large leeches were again applied near the orifice, with ſome trifling advantage. The ſlips of cloth, ſpread with ointment of elder, were continued, alſo the ſmall cataplaſm to the orifice. In the evening the eryſipelas was much diminiſhed; but the violent pain,

pain, catchings and convulſive jerks of the arm, were increaſed. I could this day obſerve, that though the eryſipelas was abated in every other part of the arm, yet it remained round the orifice of the exact form and dimenſions of the ſmall cataplaſm which had been applied to that part; therefore the orifice was dreſſed with ointment of elder, and the poultice was no longer applied.

30. I had yeſterday bathed the arm with ol. e mucilaginibus previous to applying the ointment of elder, and the patient thought it did ſome good; it was therefore now uſed freely twice a day. The eryſipelas was this day ſtill more diminiſhed; but the convulſive jerking of the arm, and the ſtiffneſs of the temporal muſcles, which threatened a locked jaw, were increaſed; and indeed theſe ſymptoms ſeemed to be almoſt entirely independent of the inflammation on the ſurface of the arm, which I had reaſon to think was in a great meaſure occaſioned by the cataplaſm, and frequent tedious repetition of the fomentation.

May 1. Yeſterday, at noon, the patient dozed a little, and was delirious; but was free from delirium in the evening, though all her other ſymptoms ſeemed to be more alarming. This morn-

ing

ing every bad ſypmtom was exaſperated, notwithſtanding that the arm externally appeared to be leſs inflamed. As there was very great reaſon ſtill to ſuppoſe that a nerve was partially divided, and in a ſtate of diſtreſs, and that the enlargement which I had made of the orifice on the 27th of April, had been done with too ſparing a hand, I determined to increaſe it; but this was to be done with great caution, becauſe the pulſation of the artery could be felt very near the correſponding vein in the other arm. The patient had great reſolution, and ſeemed to have formed ſome idea in her own mind, that ſhe ſhould get relieved from the tugging, as ſhe called it, from the part being cut. As it was probable that the nerve immediately in the punctured part muſt now be much diſeaſed, I thought it better to make the inciſion above it, in ſuch a manner as to be moſt likely to cut acroſs any nervous fibre that could run towards the orifice. The arm being properly ſecured, I began an inciſion about half an inch above the original wound, and a little to one ſide, which I brought down in an oblique direction, acroſs the ſuperior part of the orifice, and a little to the other ſide of it. This inciſion was gradually made deeper, by four or five careful ſtrokes, till

I was convinced I had gone further than the point of the lancet could have penetrated in the original bleeding. There was only a ſmall diſcharge of blood from the wound, and not the ſmalleſt appearance of matter. I could immediately obſerve the patient bend her arm with more eaſe than ſhe had done before. The wound was dreſſed with cooling cerate.

May 2. This morning I found my patient in good ſpirits, ſinging moſt chearfully, with joy and ſatisfaction painted on her countenance. She ſaid ſhe felt herſelf eaſier in leſs than ten minutes after the part was cut yeſterday, and ſhe had enjoyed ſeveral hours of refreſhing ſleep, which was the firſt ſhe had experienced for many nights. She could now move her arm, without much pain, in every direction; ſhe ſtill, however, complained of ſome numbneſs in her arm; but from this time the orifice and the inciſion both healed as common wounds.

From the termination of this caſe, I think I may venture to ſay, that the injury proceeded from the puncture of a nerve, which I believe often happens in bleeding, though it may ſeldom be attended with conſequences ſo truly alarming as thoſe above. What but the puncture of a nerve

can

can account for that frequent pain and uneaſineſs which often affects the muſcles of the arm ſeveral weeks after the orifice has been healed, and when all inflammation muſt have long ſubſided?

A lady, who was blooded about ſeven weeks ago by a perſon of reputation in London, complains of much pain in the ſupinator radii longus, though the orifice is perfectly healed, and the cicatrix ſcarcely perceptible. The pain frequently extends to the ſhoulder; and, what is remarkable, ſhe feels the pain ſhoot down to her hand, when the fleſhy part of the ſupinator radii is rubbed with the palm of the hand.

I have, at this time, a young woman under my care, who was blooded by a ſurgeon of reputation upwards of two years ago, and ſhe has never been free from uneaſineſs in her arm ſince: Sometimes ſhe feels moſt exquiſite pain in performing the motions of pronation and ſupination. This patient ſays ſhe felt ſuch exquiſite pain when blooded, that ſhe could not refrain from ſcreaming aloud. She was confined upwards of ſix weeks after the accident, and great part of that time to her bed. In this caſe an abſceſs formed near the orifice; but, as her arm has never been free from pain ſince ſhe was blooded, I think

think the abſceſs was the conſequence of inflammation from the puncture of a nerve. If a wound of the tendon of the biceps muſcle could account for the pain ſhe feels, one might ſuppoſe it to ariſe from that accident; becauſe the tendon lies immediately under the cicatrix, without any cellular membrane to defend it.

Another caſe fell under my care, about twelve months ago, which ſeems to be a confirmation of Mr Hunter's opinion, that the miſchief may proceed from inflammation attacking the internal ſurface of the vein.

A worthy gentlewoman, far advanced in life, of a ſcorbutic bad habit of body, was blooded in the arm in the median vein; but for what cauſe I do not know. A few days after being blooded, ſhe came from London to this neighbourhood. As ſhe complained of much pain and inflammation in the orifice, I was called to her relief. The pain gradually increaſed, and at laſt terminated in an abſceſs a few inches below the orifice, between the flexor carpi radialis and the ſupinator radii muſcles. There was another formation of matter in the orifice which kept open a long time, and at laſt the miſchief terminated in an abſceſs above the clavicle, which at that time I aſcribed

to

to the abſorption of purulent matter from the parts below, but which might probably be owing to inflammation communicated through the vein. This laſt abſceſs was attended with great pain, and was cured at laſt, after a long and tedious diſcharge. In this caſe, though there was violent pain and inflammation, yet it was not attended with thoſe peculiar ſymptoms which lead one to aſcribe the injury to the puncture of a nerve.

From the whole, I would conclude, that, though much merit is due to Mr Hunter for his ingenious obſervations on this ſubject, yet his idea is not to be generally admitted. I think the patient, whoſe caſe I have ſo particularly related, would, in all human probability, have ſoon been ſeized with a locked jaw, had the inciſion which cured her been neglected; and, from an idea that the ſymptoms were occaſioned by inflammation of the internal ſurface of the vein, ſuch an inciſion could not have been indicated. From this circumſtance, it is not a matter of mere curioſity to be able to diſtinguiſh whether the injury proceeds from one cauſe or the other, but a circumſtance eſſentially intereſting to the practical ſurgeon; as, in one caſe, the moſt alarming ſymptoms may be ſpeedily removed by a ſmall

inciſion, which, in the other, could be productive of no manner of advantage.

It is remarkable, in the caſe I have deſcribed, that little or no advantage was experienced from the uſe of emollient applications; nay, ſome of them, particularly the fomentation and cataplaſm, were rather prejudicial; and yet I believe ſuch-like applications would be uſed in a ſimilar accident by almoſt every ſurgeon. Heiſter and Wiſeman both recommend a very different treatment. The former, ſpeaking of the ſame accident, which happened to Charles IX. King of France, when he was blooded by Parry, ſays: 'Primo loco o-'leum terebinthinae cum ſpiritu vini rectificato, 'calidum immiſſum vulnere fuit;' and preſently after he adds, 'Caeterum haud aliena quoque 'haec videtur curandi ratio, ſi nimirum pro tere-'binthinae oleo vinique ſpiritu, balſamum Peru-'vianum, vel et aqua regina Hungaria aliquoties 'per dies ſingulos calida inſtillantur atque ſimul 'ſuperimponuntur, dum ſcilicet dolores imminu-'antur.' Wiſeman recommends an application to be dropped ſcalding-hot upon the orifice.

I believe few ſurgeons would now uſe ſuch remedies; and yet, if I was again called to a ſimilar accident

accident to the one I have related, my firſt application ſhould certainly be the oil of turpentine made warm, from having had ſo recent an opportunity of obſerving the uniform inſignificancy of thoſe applications which are commonly called cooling and emollient. I think the oil of turpentine bids fair to do good, from its great uſe when applied to a puncture from a pin or needle: It is pretty generally applied in ſuch caſes by country-people, and they find it to be efficacious in preventing the part from what they call feſtering.

The volatile alkali, dropped on the ſciatic nerve of a frog, renders the leg and thigh of that animal paralytic. Query, Whether ſuch an application, which ſeems to poſſeſs a power of deſtroying the nervous influence, might not be equivalent to dividing the punctured branch of a nerve?

III.

An Account of the Extirpation of a polypous Excreſcence from the Os Uteri. By Mr Fielding Beſt Fynney, *Surgeon at Leek in Staffordſhire.*

ABOUT the middle of April 1774, I was called to Jenny Locker of this town, aged 21 years, low in ſtature, but of a ſanguineous habit of body; who, upon examination, I found was afflicted with a prolapſus uteri, together with a polypous excreſcence growing juſt within, and hanging pendulous from the os uteri. It was rugous, highly red, and in ſome places of a dark purple colour; it frequently bled upon the moſt gentle touch; and, upon the whole, it had the moſt unfavourable aſpect of any polypus I ever ſaw.

She, amongſt the anſwers to the interrogatories which I then put to her, informed me, that, when ſhe was about ten years of age, one of her companions, with whom ſhe was playing, puſhed her down upon a ſtool with three feet, which was turned topſy-turvy, and one of the feet, which

were

were ſmall ones, paſſed into the vagina, and occaſioned much pain, with a large effuſion of blood; but in a few days ſhe was apparently well, and continued ſo until the beginning of the year 1773, when ſhe complained to her mother of ſomething protruding from the labia pudendi, but would let nobody examine the part, until the latter end of the ſame year, or the beginning of the year 1774, ſhe ſhewed herſelf to a midwife, and ſince then, to ſeveral gentlemen of eminence amongſt the faculty in this, and the adjacent towns.

I recapitulated the method I intended to purſue to her and her friends; and, after adminiſtering a few doſes of purging phyſic, I paſſed a ligature, upon the 5th day of May, as near the baſis of the tumour as I poſſibly could; but it not anſwering according to my expectation, I extirpated it with the knife, above the ligature, on the 7th, rather taking part of the os uteri, than leaving any of the polypus; which weighed nine drams troy weight. A moſt obſtinate haemorrhage enſued, to ſtanch which, I applied a doſſil of lint well charged with powdered blue vitriol, and retained upon the part, with gentle compreſſion, by the hand of her nurſe, until it ceaſed; after which I applied an emolient poul-

tice. I daily touched the part with lunar cauſtic, to deſtroy any remains of the polypus that might have eſcaped me, and dreſſed with mild digeſtives, over which, for a few days, I continued the poultice. The part was quite healed, and radically cured on the 21ſt day of May, when I replaced the uterus in its natural ſituation, and applied a proper peſſary to keep it ſo.

REFLECTIONS.

I preſume that the faculty in general will join me in opinion, that this polypus originated from the injury done to the mouth of the womb by the ſtool-ſcoop, as thoſe of the noſe are frequently occaſioned by ſome violence done to the glands, and minute circulating veſſels of the pituitary membrane, as picking, or blowing forcibly down the noſe, taking ſnuff, &c.

I ſhall never heſitate to repeat the method of extirpation by exciſion, when the caſe is either circumſtanced as above, or when the polypus is ſeated low in the vagina: But, when there is no prolapſus uteri, and the tumour high up, then the method of extirpation by ligature, aſſiſted by the inſtrument, repreſented in the *memoires de l'academie*

démie royale de chirurgie, tom. trois, pl. 13. fig. 3. p. 598. is undeniably preferable to all others.

I durſt not make uſe of the needle and ligature to ſtop the haemorrhage, on account of the irritability of the part. The tenaculum would not anſwer my purpoſe in this caſe, as the veſſel lay too high within the mouth of the womb. And the ſponge I did not chooſe to apply, as the granulations of fleſh always ſhoot up into its pores, and are productive of pain at the time of ſeparation, eſpecially in irritable habits, or in parts ſo nervous as this is.

There are various forms of peſſaries, and made of as many ſorts of materials; but that which I would recommend, ſhould have no ſcrews about it, as they ſoon ſwell and burſt by being kept humid; therefore it ſhould be turned out of one ſolid piece of ivory, the head to be made rather concave on the upper ſide, with three or four holes in it, to let paſs the fluids ſecreted by the part to which it is adapted; and convex on the lower ſide, with a ſtem or pillar of proportionable length, coming from its middle; and, at the bottom of the ſtem, ſhould be a hole or two to paſs a fillet through to faſten it to its proper bandage.

SECT. III.

Medical News.

ON Sunday the 12th of January 1777, died at Edinburgh, Mr John Innes, diſſector to Dr Monro, Profeſſor of Medicine in the Univerſity of that city.

Mr Innes was born at Callart, a ſmall town in the Highlands of Scotland, within a few miles of Fort William. From this ſituation, it may be preſumed, that the earlier part of his education was but ill calculated for literary purſuits, or for his improvement in the liberal arts. But the want of proper opportunities at his firſt outſet in life, were amply compenſated by the united efforts of induſtry and genius. And ſuch was the proficiency he had ſoon made in anatomical knowledge; ſuch was

the

the addreſs he had acquired in diſplaying the ſtructure of the moſt minute parts of the human frame, that, when he had not even reached the 18th year of his age, Dr Monro had no heſitation in appointing him diſſector for the anatomical claſs. This important and troubleſome office, he filled with high and deſerved reputation, for the ſpace of near twenty years. During all that period, his labours gave equal ſatisfaction both to the Profeſſor and to the ſtudents; and the preſumption is, that, in the way of his profeſſion, he had very few, if any, ſuperiors.

But, however conſiderable his abilities in this reſpect might be, it would be the higheſt injuſtice to his talents, to repreſent them as confined merely to the mechanical part of anatomy. When he had occaſion to ſpeak of the ſtructure of any organ, he poſſeſſed a facility in deſcription, which could not fail to convey the cleareſt idea. This the ſtudents ſoon perceived, and were willing to avail themſelves of the advantages which it might afford. At their ſollicitation, therefore, after he had enjoyed his office about ten years, he opened an evening courſe of lectures for anatomical demonſtrations. The judgment and perſpicuity which he diſplayed in theſe demonſtrations,

tions, afforded no leſs pleaſure than inſtruction to every hearer. The number of gentlemen who became his pupils every year, afforded the moſt unequivocal proof of the advantages which were to be derived from his prælections. At his laſt courſe, he had the honour of being attended by near two hundred ſtudents. And there is ſome probability, that, had he been leſs zealous in diſcharging the duties of his office, he might longer have enjoyed the emoluments of it. For ſome time he had been threatened with an affection of his lungs; but, while he was following ſuch meaſures as were directed for his recovery, he did not relinquiſh the duties of his office, till he was confined to a ſick-bed chamber. There the approaches of death were no leſs evident to himſelf than to others. And he prepared to meet the event with a frame of mind which gave equal evidence of the honeſt man, the affectionate ſon, the faithful huſband, and the dutiful parent. He ſettled with all his creditors on his death-bed. He put a wife and children in circumſtances above indigence. And, with filial affection, he provided againſt the future wants of aged and helpleſs parents. His death will be regreted, and his memory will be eſteemed by all who had the pleaſure

ſure of his acquaintance. For his temper was ſocial and obliging, his heart was open and generous, his friendſhip was ſteady, and his integrity was unimpeached.

While, from theſe qualities, he yet continues to live in the affections of his friends, thoſe who, with care and induſtry, apply to the ſtudy of anatomy, will ſtand indebted to him for obligations of a different nature. The monuments which he has given to the world of his anatomical knowledge, will afford ample teſtimony of his abilities to future ages.

About the beginning of the year 1776, he publiſhed a ſhort Deſcription of the Human Muſcles, chiefly as they appear in diſſection; together with their ſeveral uſes, and the ſynonyma of the beſt authors. A Treatiſe, which will recommend itſelf to the peruſal of every ſtudent, by the conciſe and ſimple, yet plain and accurate deſcriptions, which it contains. Towards the cloſe of the ſame year, he publiſhed eight anatomical tables of the human body, containing the principal parts of the ſkeletons and muſcles repreſented in the large tables of Albinus; to which are added, conciſe explanations. If, in this work, thoſe who have a taſte for elegant engraving, ſhall think

think that there is any ground for finding fault with the execution of the artiſt, yet every intelligent anatomiſt will allow, that the fidelity of the explanation muſt render it of no inconſiderable utility to the young ſtudent.

Had Mr Innes lived to a more advanced age, there is no reaſon to doubt, that the improvement of his art would ſtill have continued to be the object of his ambition. While his untimely death will be moſt ſeverely felt by his friends and family, it may alſo be conſidered as a loſs to the medical world, and will long be regreted by the ſtudents of anatomy at Edinburgh.

* * * *

Extracts of a letter from Dr George Brown, Apothecary to his Majeſty's hoſpitals in America, to Dr John Hope, Profeſſor of Botany in the Univerſity of Edinburgh, dated September 14. 1776.

'Laſt ſummer the dyſentery was very frequent, and a good many died. Beſides the common medicines, the rad. columb. and cort. eleuther. were given in a number of caſes; but I could not perceive, from their effects, that they deſerve the character

character which has been given of them. The vitr. antimon. cerat. was likewiſe employed, and frequently with ſucceſs. However, I think I may venture to aſſert, from experience, that the tartar emetic produces all the good effects of the other preparations, with the advantage of being much more certain and ſteady in its operations.

'In the fall, the ſcurvy began to make its appearance among the regiments that had been longeſt in America, and, as the cold weather advanced, it attacked the reſt of the troops. A variety of medicines were uſed, moſt of which mitigated ſome of the ſymptoms; but no cure was effected till a quantity of ſour kraut arrived from England, which was given to the ſcorbutics ad libitum, to eat as a ſallad with vinegar. At other times it was boiled with their meat; and it was really ſurpriſing to ſee the effects which it had, even in a ſhort time. They devoured it greedily, and recovered apace.

'A great quantity of this uſeful article arriving, it was iſſued to the army twice a week, with their ſalt proviſions. And it was as effectual in preventing, as it had been in curing that diſeaſe, which perhaps is, of all others, the moſt to be dreaded,

dreaded, in a garriſon living on ſalt proviſions, in a cold climate, and ſubjected to hard duty.

'During the time that they uſed the ſour kraut, by the advice of ſome officers of rank who had ſerved laſt war in Canada, they were ordered to drink a pint of the infuſion of hemlock ſpruce, as it is called, every morning; but this was ſo nauſeous that few of them took it regularly. However, that omiſſion was ſupplied, by allowing them plenty of ſpruce beer, in my opinion the beſt medicine of the two.

'One man had been ill of the ſcurvy for three months, and had ſeveral haemorrhagies from the gums, the fauces, and noſe. By the above treatment, he got the better of the ſcurvy, but he was afterwards ſeized with an anaſarca and aſcites. For this he was topped, and three gallons of water drawn off; and, by the uſe of the Peruvian bark, and other tonics, he was perfectly recovered, and diſcharged to his duty.

'The flowers of zinc have been found an uſeful application to ſordid ulcers from gunſhot-wounds, and other cauſes, when ſtrewed upon the part by means of a barber's puff. Among the wounds at Boſton, we had a few inſtances of te-

tanus,

tanus, both when amputation was performed, and when it was not neceſſary. All the inſtances of this affection which I ſaw, were fatal, although we tried opium, muſk, and aether, in large quantities, both externally and internally. Nor did bliſters give any relief. In one caſe, this ſymptom did not come on till a fortnight after the patient was wounded, and when he was judged in a fair way for recovery. He was ſhot through the thigh and arm, both very near the articulation. I heard of an officer who had this ſymptom, and recovered. He was ſhot through the abdomen. There was one amputation of the humerus at the articulation, and the patient did well.

* * * *

Mr Matthew Guthrie, Surgeon at St Peterſburgh, in a letter to Dr Hope, gives the following account of a curious ſtone lately found in Ruſſia.

'I have juſt received a paper upon a curious ſtone, with a piece of it, for the purpoſe of experiments, from Mr Krafft, profeſſor of natural philoſophy in the imperial academy. He has alſo ſubjoined a

a liſt of experiments, which he thinks ſhould be made upon it, as he remarks that it bids fair to make the beſt hygrometer ever diſcovered, from the circumſtances of its having two determined points of moiſture and dryneſs.

'He informs me, that it was found by the late unfortunate Profeſſor Lowitz, who was put to death by the rebel Pugatcheff for being a ſcholar. He was one of thoſe academicians who were ſent by her Majeſty into the moſt diſtant parts of the empire, with a view of making diſcoveries. Among his papers were found a few remarks on this ſtone, of which the following is as literal a tranſlation as poſſible:

'Upon the banks, on the right ſide of Kamiſhink, near the caſtle Demitrieſk, is found a ſort of ſtone, ſomething like a ſlate, reſembling a dark grey or blue grind-ſtone. Some, however, are of a yellow caſt, and ſome have their oppoſite ſides of different colours. This ſtone, when wet, may be eaſily cut with a knife, but when dry, it is much harder.

'In this laſt ſtate it has the remarkable effect, that, on the tongue being applied to it, it lays hold of it ſo faſt, that it is with difficulty they are

are ſeparated; and, if it be not very ſoon removed, it will draw blood with it. The ſeparation, in every caſe, muſt be effected with great circumſpection, otherwiſe the ſkin will follow the ſtone. It attracts any thing that is wet or moiſt, ſo that if you put a wet finger to it, it will ſtick: And it drinks up moiſture with the greateſt avidity. If, however, it be put into water for ſome minutes, ſo as to be fully ſaturated, it loſes its abſorbing power for a little, which it recovers as it dries.

'Another quality of this ſtone is, that when put into the fire, it may be made red-hot, without cracking or ſuſtaining any damage; on the contrary, its abſorbing power is increaſed by it; but care muſt be taken that it be well dried firſt; for if it contains any moiſture when put into the fire, it will burſt in pieces.

'This is the ſubſtance of the memorandum found among the papers of Mr Lowitz. Mr Krafft propoſes to have the following experiments tried upon it.

1. To know the quantity of water which it will contain when fully ſaturated with that fluid.

2. To find the time in which it abſorbs a given quantity.

3. To compare its weight when dry and when full of water.

4. To find the time it takes in parting with a given quantity of water.

5. To diſcover whether it will imbibe every day the ſame quantity.

6. To diſcover how far the changes of the atmoſphere affect the power it poſſeſſes of abſorbing moiſture.

7. To diſcover whether it always abſorbs a determined quantity.

'I intend, beſides theſe, to try ſeveral other experiments with this ſtone, and to ſend an account of the reſult of them for the Medical and Philoſophical Commentaries of Edinburgh.'

* * *

Mr Andrew Fife has ſucceeded the late Mr John Innes as diſſector to Dr Monro. From the induſtry and genius which he has already ſhown, much may hereafter be expected. About two years ago, the annual prize-medal, given by the commiſſioners for improvements in Scotland, for

for the beſt drawing in the academy which they have eſtabliſhed at Edinburgh, was adjudged to him. And he has made rapid progreſs in many different branches of literature.

* * *

A new edition of the treatiſe which Dr Cullen delivered to his ſtudents, as a text for the phyſiological part of his lectures, when he taught the inſtitutions of medicine in the univerſity of Edinburgh, is now in the preſs, and will ſoon be publiſhed.

* * *

Mr Andrew Bell, engraver at Edinburgh, an artiſt of whoſe merit the world have already had various ſpecimens, is now engaged in making a new and improved edition of the tables of the celebrated Albinus upon the bones and muſcles of the human body. To render this work cheaper and more commodious, Mr Bell propoſes to publiſh theſe tables in ſeparate parts; and, for the ſame purpoſe, he has made a ſmall reduction of the original ſcale. The firſt part of this valuable performance will, we are informed, appear in a few weeks.

SECT.

SECT. IV.

List of New Books.

FIRST lines of the practice of physic, for the use of students in the university of Edinburgh. By William Cullen, M. D. Vol. I. 8vo, Edinburgh.

An address to the students of medicine at Edinburgh, introductory to a course of lectures on the theory and practice of physic. Delivered Nov. 1. 1776. By Andrew Duncan, M. D. Fellow of the royal college of physicians, Edinburgh. 12mo, Edinburgh.

Heads of lectures on the theory and practice of medicine, by the same author, 12mo, Edinburgh.

Dissertatio medica, de natura et usu lactis in diversis animalibus, auctore Thoma Young, in academia

cademia Edinenſi artis obſtetriciae profeſſore, 8vo, Edinburgi.

Compendium anatomicum, totam rem anatomicam breviſſime complectens, auctore B. D. Laurentio Heiſtero, M. D. editio nova, 12mo, Edinburgi.

Experiments on magneſia alba, quick-lime, and other alkaline ſubſtances, by Joſeph Black, M. D. profeſſor of chemiſtry in the univerſity of Edinburgh, to which is annexed an eſſay on the cold produced by evaporating fluids, and on ſome other means of producing cold. By Willam Cullen, M. D. Profeſſor of medicine in the univerſity of Edinburgh. 12mo, Edinburgh.

Philoſophical tranſactions of the royal ſociety of London. Vol. LXVI. Part I. for the year 1776. 4to, London.

Medical reſearches: Being an inquiry into the nature and origin of hyſterics in the female conſtitution, and into the diſtinction between that diſeaſe and hypochondriac or nervous diſorders. Comprehending a ſpecification of the characteriſtic refinement and excellence of the female conſtitution and character. By Andrew Wilſon, M. D. Fellow of the royal college of phyſicians

at

at Edinburgh, and phyſician to the Medical Aſylum, London. 8vo, London.

A modern ſyſtem of natural hiſtory, containing accurate deſcriptions, and faithful hiſtories of animals, vegetables, and minerals. Together with their properties and various uſes in medicine, mechanics, &c. Illuſtrated with copper-plates, accurately drawn from nature, and beautifully engraved. By the Rev. Samuel Ward, Vicar of Cottenſtoch, Northamptonſhire. 4 vols. 12mo.

Obſervations preparatory to the uſe of Dr Myerſbach's medicines; by J. C. Lettſome, M. D. F. R. S. and S. A. member of the college of phyſicians, and phyſician to the general diſpenſary in London. The ſecond edition, conſiderably enlarged. 8vo, London.

An anſwer to a pamphlet written by Dr Lettſome, intitled, obſervations preparatory to the uſe of Dr Myerſbach's medicines. 8vo, London.

Every woman her own phyſician, or the ladies Medical Aſſiſtant, Containing the hiſtory and cure of the various diſeaſes incident to women and children. 12mo, London.

A Botanical arrangement of all the vegetables naturally growing in Great Britain, with an eaſy intro-

introduction to the ſtudy of botany. By William Withering. M. D. in 2 vols, Brimingham.

Les Monſtres, ou les ecarts de la nature, ouvrage qui renferme toutes les monſtruoſities que la nature produit, ſoit dans l'eſpece humaine, ſoit parmi les quadrupedes, les bipedes, &c. en planches colories, peintes, et gravées, par M. et Madame Reynault, auteurs de la Botanique miſe a la portée de tout le monde. Folio Paris.

Recueil des Oeuvres phyſiques et medecinales, publies en Anglois et en Latin, par M. Richard Mead, Medecin du Roi de Grand Bretagne, membre de la ſocieté royale de Londres, &c. par M. Coſte, medecin de l'hopital royal et militaire de Nancy. 2 vols, 8vo, Bouillon.

Lettres ſur les arbres et epiceries, avec une inſtruction ſur leur culture, et preparation, et lettre ſur le Café. 12mo, Paris.

Avis aux mere qui veulent nourir leurs enfants, troiſieme edition, revue et conſiderablement augmenté, par Mad. le Rebours. 12om, Paris.

Le Medecin interprete de la nature, ou recueil des pronoſtics ſur le charactere des maladies, leur gueriſon, leures metaſtaſes, et leurs ſuites funeſtes, traduit du Latin de M. le Docteur Louis Geoffroi Klein,

Klein, conſeiller medecin et phyſicien d'Erbac, par M. J. F. A. Docteur en medecine de le faculté Montpellier. 2 vols. 12mo, Paris.

Apparatus ad noſologiam methodicam, ſeu ſynopſis noſologiæ methodicæ, in uſum ſtudioſorum, auctore Gullielmo Cullen, M. D. et in academia Edinburgena profeſſore, editio nova, juxta ſecundam ill. Culeni in quatuor partes, Edinburgi anno 1772 editam, nunc quinta parte aucta, ſcilicet ſyſtemate morborum ſymptomatico, A. B. M. Sager propoſito. 4to, Amſtelodami.

Andreæ Piqueri archiatri, praxis medica ad uſum ſcholæ Valentinæ. Amſtelodami in 8vo.

Adverſaria medica, auctore J. D. Metzger, Med. Doctore, Cels. Com. Bonth. Steinf. conſil. Aulic. et Archiatro, comito. Steinf. phyſico ordin.; continent chirurgica, phyſiologica, practica. 8vo, Trajecti ad Moſam.

Diſſertationes medicae quas ex auctoritate reverendi admodum viri Gulielmi Robertſon, SS. T. P. Academiae Edinburgenae Praefecti; nec non ampliſſimi ſenatus academici conſenſu et nobiliſſimae facultatis medicae decreto; pro gradu doctoratus, ſummiſque in medicina honoribus et privilegiis rite et legitime conſequendis; eruditorum

rum examini ſubjecerunt, Prid. Id. Septemb. 1776,

Jacobus Wood, Britannus, De actione et uſu emeticorum.

Joannes Heathfield Hickes, Britannus, De natura et uſu epiſpaſticorum.

Joannes Tailour, ex Inſula Sancti Chriſtopheri, De cynanche gangrenoſa.

Joannes Shepherd, Scotus, De pneumonia.

Thomas Clerk, Scoto-Britannus, De hydrocephalo.

Samuel Graham, Scoto-Britannus, De gonorrhoea virulenta.

Samuel Nicol, Americanus, De arthritide.

Samuel Daniel, Britannus, De ictero.

Joſiah Gibbons, Georgienſis, De quibuſdam puerperarum morbis.

Gulielmus Holland, Britannus, De cynanche tonſillari.

Books.

Koeſtlin, C. H. Diſſertatio de effectibus electricitatis p. 131
Raymond, J. Deſcriptio febrium autumnalium Mittelburgi graſſantium 140
Portal, M. Obſervations ſur la ſituation des viſceres du bas ventre chez les enfans 152
Morand, M. Recapitulation des baptêmes, &c. de la ville et faubourgs de Paris 160
Bertin, M. Memoires ſur les enfans qui naiſſent ſans un veritable anus 164
Garthſhore, Dr. Caſes of retroverted uterus, with remarks 173
Fothergill, Dr. The caſe of a hydrophobia 179
Thomſon, Henry, Account of ſoftneſs of the bones 191
Ruſh, Dr Benjam. Account of an aſthma from an uncommon cauſe 198

Medical Observations.

The hiſtory of a caſe of the morbus niger, with ſome remarks on the effects of Camphor. By Dr Henry Marcard, *phyſician at Hannover* 203

The

The case of the puncture of a nerve in phlebotomy, communicated to Dr Andrew Duncan. By Mr John Sherwen, *surgeon, Enfield, Middlesex* 219

An account of the extirpation of a polypous excrescence from the os uteri. By Mr Fielding Best Fynney, *Surgeon at Leek in Staffordshire* 228

MEDICAL NEWS 232

LIST OF NEW BOOKS 244

MEDICAL

AND

PHILOSOPHICAL

COMMENTARIES.

By a SOCIETY in EDINBURGH.

VOLUME FOURTH.

PART III.

Non ut diu vivas curandum eſt, ſed ut ſatis. Nam ut diu vivas fato opus eſt, ut ſatis animo. Longa eſt vita ſi plena eſt. Quid illum octaginta anni juvant per inertiam exacti? Non vixit iſte, ſed in vita moratus eſt; nec ſero mortuus eſt, ſed diu. SENECA.

LONDON:

Printed for J. MURRAY, No. 32. Fleet-ſtreet;
W. CREECH, C. ELLIOT, and DRUMMOND,
Edinburgh; and T. EWING,
Capel-ſtreet, *Dublin.*

M,DCC,LXXVII.

MEDICAL COMMENTARIES.

SECT I.

An Account of Books.

I.

Diſſertatio Chemica de Acido Sacchari, Auctore Johanne Afzelio Arvidſſon. 4to, Upſaliae.

SUGAR being very deſervedly conſidered as an eſſential ſalt, no perſon, it is probable, will doubt of its containing an acid of one kind or another; and this we are informed by our author may, in a cryſtalline form, be obtained from it by the following proceſs.

1. To an ounce of the fineſt white ſugar in powder, in a retort with a neck, add three ounces of ſtrong ſpirit of nitre.

2. The ſolution being finiſhed, and the phlogiſton of the ſpirit of nitre moſtly exhaled, let a receiver be properly fitted to the retort, and luted, and the liquor then made to boil gently.

3. When the ſolution has obtained a browniſh colour, add three ounces more of ſpirit of nitre, and let the ebullition be continued till the fumes of the acid are almoſt gone.

4. The liquor being at length emptied into a larger veſſel, and expoſed to a proper degree of cold, quadrangular priſmatic cryſtals are obſerved to form; which, being collected and dried on ſoft paper, are found to weigh about 109 grains.

5. The remaining liquid being again boiled in the ſame retort, with two ounces of freſh ſpirit of nitre, till the red vapours begin to diſappear; and being then in the ſame manner expoſed to cryſtallize, about 43 grains of ſaline ſpiculae are obtained.

6. To the liquor that ſtill remains, about two ounces more of ſpirit of nitre being added, and afterwards

afterwards the whole being, both by boiling and evaporation, reduced to a dry maſs, a brown, ſaline, gelatinous kind of ſubſtance is produced, which, when thoroughly dry, is found to weigh about half a dram.

In the ſame manner a ſimilar acid, we are told, may be obtained from different ſaccharine ſubſtances, as gum arabic, honey, &c.; but from none in ſuch quantities, or ſo pure, as from fine ſugar.

This ſalt appears to poſſeſs ſome qualities peculiar to itſelf, and others in common with ſaline ſubſtances in general.

1. It is endued with a remarkably ſharp taſte, about twenty grains of it giving a conſiderable degree of acidity to a large tankard of water.

2. It produces a red colour on being added to any of the blue vegetable infuſions, that of indigo only excepted.

3. It produces an effervescence on being added to ſuch alkaline, earthy, or metallic ſubſtances, as happen to be combined with the vitriolic acid.

4. This ſalt may be diſſolved in its own weight

of boiling diſtilled water; the liquor, when cold, however, depoſits large quantities of cryſtals of different forms.

5. Theſe cryſtals can be combined with all the different acids, viz. the vitriolic, nitrous, marine, and acetous.

6. One hundred parts of boiling ſpirits of wine, diſſolve about fifty-ſix of theſe ſaccharine cryſtals, but not more than forty when not ſo warm. A ſolution thus obtained ſoon becomes turbid, and depoſits a mucous ſediment, of about the 40th part of the weight of all the acid made uſe of. When cold, irregular ſcaly cryſtals are obtained from it, which, when thoroughly dry, become perfectly white.

With rectified ſpirits of wine, and theſe ſaccharine cryſtals, aether may be formed; which differs, however, from common aether, in its not being eaſily ſet on fire, without being previouſly heated, and, when on fire, it burns with a blue in place of a white flame.

7. Vitriolic aether diſſolves with difficulty the acid of ſugar.

8. It combines both with the eſſential and expreſſed

preſſed oils; but, by a ſtrong fire, can be eaſily ſeparated from either.

9. Being expoſed to a gentle heat, in a ſmall retort fitted to a receiver, about three tenths of the whole quantity comes over in the form of water; and, by an intenſe heat, it melts, and a ſaline white cruſt is ſublimed, leaving in the retort a dark grey maſs of about the fifth part of the weight of the cryſtals made uſe of. This reſiduum has an empyreumatic ſmell, gives a dark colour to concentrated ſpirit of vitriol, a yellow tinge to ſpirit of nitre, but is diſſolved by the marine acid, without occaſioning any alteration in its appearance. The ſublimed ſalt eaſily recovers the cryſtalline form, and does not appear to be in any reſpect changed by the operation, further than in having become more pure. The liquor contained in the receiver occaſions a precipitation on being added to lime-water; and, on ſeparating the receiver from the retort, a vaſt quantity of an elaſtic vapour ruſhes out, of a pungent empyreumatic odour. About 100 cubic inches of ſuch air may be obtained from half an ounce of the cryſtals.

The acid of ſugar being a ſecond time ſubmitted to a ſubliming proceſs, white fumes are ſent

over, which, when cold, appear to be an acid glaſſy-coloured liquor, but which cannot be again cryſtallized. Such parts of the ſalts as adhere to the ſides and necks of the veſſels, do not appear to be in the leaſt changed by the proceſs. Theſe, when expoſed a third time to ſublimation, produced ſuch elaſtic vapours as burſt the receiver.

Alkali Vegetabile Saccharatum.—Cryſtals can ſcarcely be obtained from acid of ſugar exactly ſaturated with the vegetable alkali; but are eaſily procured by making either the acid or alkali prepondérate in the mixture.

Alkali Minerale Saccharatum.—Two parts of lately formed mineral alkali, combined with one of acid of ſugar, produces a ſalt very difficult of ſolution.

Alkali Volatile Saccharatum.—Six parts of a pure volatile alkali, can be ſaturated with one of the acid of ſugar; and the mixture, on evaporation, affords a quadrangular priſmatic ſalt.

Calx Saccharata.—Lime is ſo ſtrongly attracted by the acid of ſugar, as to be ſeparated from it by no other means than the intervention of

a

a ſtrong heat. From this circumſtance, the utility of lime in the purification of ſugar becomes evident; for, in the juice of the ſugar-cane, there is ſuch a ſuperabundancy of acid, as effectually prevents its concretion, till that ſaline matter is at leaſt in part deſtroyed; and nothing has hitherto been found ſo effectual in that reſpect as lime, which, by combining with the acid, either carries it to the bottom of the boiler, or to the top, from whence it is eaſily ſkimmed off. From lime being uſed in conſiderable quantities in the purification of ſugar, many have imagined, that large portions of it remain even in the fineſt ſugar. This opinion, however, our author aſſerts to be erroneous, as the ſtricteſt analyſis has never been able to detect the ſmalleſt particle of lime in purified ſugar.

Terra ponderoſa ſaccharata.—The acid of ſugar being ſaturated with any of the heavier earths, immediately depoſits a quantity of pellucid angular cryſtals, ſcarcely ſoluble in water.

Magneſia ſaccharata.—The acid of ſugar diſſolves magneſia, and from the ſolution may be obtained a neutral ſalt, in the form of a white powder, which, unleſs the acid prevailed, is neither ſoluble in water nor ſpirit of wine. Magneſia

ſia ſeems to have a ſtronger affinity to the acid of ſugar than any of the alkaline ſalts; hence any of the latter may be ſeparated from it by the addition of magneſia.

Argilla ſaccharata.—Forty-two parts of the earth of allum properly purified, may, by digeſtion, be diſſolved in 53 of acid of ſugar; the ſolution on evaporation does not afford cryſtals, but a yellow pellucid maſs, of a ſweetiſh, and ſomewhat aſtringent taſte, which, in a moiſt air, liquifies, and thereby receives two thirds of addition in weight.

Aurum ſaccharatum.—Gold is not, even by digeſtion, affected by the acid of ſugar; but, being precipitated by a fixed alkali, and afterwards thoroughly waſhed in warm water, it is then rendered black by it, though not entirely diſſolved. Neither is *platina* diſſolved in this acid, unleſs previouſly precipitated by a fixed alkali. In the ſame manner too, though *ſilver* itſelf is not ſoluble in the acid of ſugar, yet it comes to be acted upon by it, when precipitated by an alkali.

Hydrargyrus ſaccharatus.—Quickſilver is not in the leaſt affected by this ſaccharine acid, unleſs previouſly deprived of its phlogiſton; in which

ſtate

ſtate it becomes ſoluble in it; and, from a ſolution formed by the two, is obtained a whitiſh powder, not ſoluble in water, unleſs the acid had prevailed. *Lead*, digeſted in the acid of ſugar, is rendered black, but not diſſolved by it, unleſs previouſly calcined; and *Copper* is conſiderably affected by it, but becomes more ſoluble in it, by being previouſly precipitated by an alkali.

Ferrum ſaccharatum.—Iron is quickly diſſolved in the acid of ſugar, and affords, on evaporation, priſmatic yellow-coloured cryſtals, which are eaſily ſoluble in water. Fifty-five parts of the acid diſſolve forty-five of iron.

Stannum ſaccharatum.—Tin, digeſted in the acid of ſugar, with the aſſiſtance of heat, turns firſt black, and is afterwards covered with a greyiſh-coloured powder; the calx often is alſo ſoluble in the ſame acid. *Biſmuth* and *arſenic* are both ſoluble in this acid, as is likewiſe cobalt; cobalt, diſſolved in it, yields a quantity of yellow-coloured cryſtals, which, as they contain a large proportion of the acid, are readily ſoluble in water. By the addition of common ſalt to a ſolution of this kind, a ſympathetic ink may be obtained. *Zinc* is ſoluble in the ſaccharine acid, as is likewiſe, in

ſome

ſome degree, the calx and glaſs of antimony; regulus of antimony is only rendered black by it.

Acidi ſacchari attractiones electivae.—The affinity of acid of ſugar with other bodies, appears by experiment to ſtand in the following order. It unites moſt readily with lime; then follow the heavier kinds of earths, magneſia, vegetable alkali, mineral alkali, volatile alkali, and, laſtly, clays.

Towards the concluſion of the diſſertation, our author obſerves, that, by ſome, it may, perhaps, be imagined, that the acid of nitre, made uſe of in theſe experiments, may have a conſiderable ſhare in the production of what he has termed the acid of ſugar. But, although he acknowledges, that this acid cannot in any way be obtained but by the aſſiſtance of ſpirit of nitre; yet he is thoroughly convinced, that it does not in any degree enter into its compoſition.

II.

II.

Experiments and Obſervations in an heated Room. *By* Charles Blagden, M.D.F.R.S. Vide *Philoſophical Tranſactions*, Vol. LXV. *4to*, London.

ALTHOUGH different circumſtances have prevented us from giving, as early as we could have wiſhed, an analyſis of the paper now before us, and although the facts which it contains have been much the ſubject of converſation, yet, we preſume, that the following account of it will not now be unacceptable to any of our readers who do not poſſeſs the original work.

Doctor Boerhaave, from a ſingle experiment or two, having long ago laid it down as a maxim, that no living animal can long ſupport a degree of heat much above that of its own temperature, the opinion, till of late, was ſcarcely controverted by any one. It now appears, however, from the reſult of many reiterated experiments, that animals can live with eaſe in ſuch high degrees of heat, as ſome time ago would have been thought more than enough for ſoon putting a period to their exiſtence. Several experiments on this ſubject were made ſome time ago in France; thoſe here related by Dr Blagden, were ſet on foot and carried on by Dr Fordyce of London, who,

who, it is to be hoped, will, ſome time or other, communicate, in a more ample manner, the reſults of them to the public.

Doctor Cullen long ago ſuggeſted ſeveral arguments to ſhow, that life itſelf has a power of generating heat, independent of any chemical or mechanical means; for, before his time, the received opinions were, that the heat of animals aroſe either from friction or fermentation. The Doctor likewiſe, we are informed, is of opinion, that animals are poſſeſſed of a power of generating cold, whenever the heat of the atmoſphere exceeds the proper temperature of their bodies. Governor Ellis, in the year 1758, obſerved, that a man can live in air of a greater heat than that of his body, and that the body in this ſituation continues at its uſual temperature. The Abbe Chappe d'Auteroche informs us, that the Ruſſians uſe their baths heated to 60° of Reaumur's thermometer, about 160° of Fahrenheit's, without taking notice, however, of the heat of their bodies when bathing. With a view to add further evidence to theſe extraordinary facts, and to aſcertain the real effects of ſuch great degrees of heat on the human body, Doctor Fordyce tried the following experiments. He procured a *ſuite* of rooms, of which the hotteſt was heated by flues in the floor,

floor, and by pouring upon it boiling water; and the ſecond was heated by the ſame flues, which paſſed through its floor to the third. The firſt room was nearly circular, about ten or twelve feet in diameter and height, and covered with a dome, in the top of which was a ſmall window. The ſecond and third rooms were ſquare, and both furniſhed with a ſky-light. There was no chimney in theſe rooms, nor any vent for the air, excepting through crevices at the door. In the firſt room were placed three thermometers; one in the hotteſt part of it, another in the coolеſt part, and a third on the table, to be uſed occaſionally in the courſe of the experiment.

Experiment 1ſt, In the firſt room the higheſt thermometer ſtood at 120°, the loweſt at 110°. In the ſecond room the heat was from 90° to 85°; and the third room felt moderately hot, while the external air was below the freezing point. About three hours after breakfaſt, Dr Fordyce having taken off all his cloaths, except his ſhirt, in the third room, and being furniſhed with wooden ſhoes, tied on with liſt, entered into the ſecond room, and ſtaid five minutes in a heat of 90°, when he began to ſweat gently. He then entered the firſt room, and ſtood in the part heated

ed to 110°; in about half a minute his ſhirt became ſo wet that he was obliged to throw it aſide, and then the water poured down in ſtreams over his whole body. Having remained ten minutes in this heat of 110°, he removed to the part of the room heated to 120°; and, after ſtaying there twenty minutes, he found that the thermometer placed under his tongue, and held in his hand, ſtood juſt at 100°, and that his urine was of the ſame temperature. His pulſe had gradually riſen till it made 145 pulſations in a minute. The external circulation was greatly increaſed, the veins had become very large, and an univerſal redneſs had diffuſed itſelf over the body, attended with a ſtrong feeling of heat; his reſpiration, however, was but little affected. Here Dr Fordyce remarks, that the moiſture of his ſkin moſt probably proceeded chiefly from the condenſation of the vapour in the room upon his body. He concluded this experiment in the ſecond room, by plunging into water heated to 100°, and, after being wiped dry, was carried home in a chair; but the circulation did not ſubſide for two hours, after which he walked out in the open air, and ſcarcely felt the cold.

Expe-

Experiment 2d. In the firſt room the thermometer varied from 132° to 130°; the loweſt ſtood at 119°. Doctor Fordyce having undreſſed in an adjoining chamber, went into the heat of 119°; in half a minute the water poured down in ſtreams over his whole body, ſo as to keep that part of the floor where he ſtood conſtantly wet. Having remained there fifteen minutes, he went into the heat of 130°; at this time the heat of his body was 100°, and his pulſe beat 126 times in a minute. While the Doctor ſtood in this ſituation, he ordered a Florence flaſk to be brought in, filled with water, heated to 100°, and a dry cloth, with which he wiped the ſurface of the flaſk quite dry; but it immediately became wet again, and ſtreams of water poured down its ſides, which continued till the heat of the water within had riſen to 122°, at which time the Doctor went out of the room, after having remained fifteen minutes in an heat of 130°. Juſt before leaving the room, his pulſe made 139 beats in a minute; but the heat under his tongue, in his hand, and of his urine, did not exceed 100°. Here Doctor Fordyce obſerves, that, as there was no evaporation, but conſtantly a condenſation of vapour on his body, no cold was generated but

by the animal powers. The Doctor dreſſed himſelf at the concluſion of the experiment, in a room where the thermometer ſtood at 43°, and immediately went out into the open air, without feeling the leaſt inconvenience; on which he remarks, that the tranſition from very great heat to cold, is not ſo hurtful as might be expected, becauſe the external circulation is ſo excited as not to be readily overcome by the cold.

Dr Fordyce has ſince had occaſion, in making other experiments, to go frequently into a much greater heat, where the air was dry, and to ſtay there a much longer time, without being affected nearly ſo much, for which he aſſigns two reaſons; that dry air does not communicate its heat like air ſaturated with moiſture, and that the evaporation from the body, which takes place when the air is dry, aſſiſts its living powers in producing cold.

In a *third* experiment, at which were preſent, along with Dr Fordyce, the honourable Captain Phips, Mr Banks, Dr Solander, and Dr Blagden, the room made uſe of was an oblong ſquare, 14 feet by 12 in length and width, and 11 in height; it was heated by a round ſtove or cockle, of caſt iron, which ſtood in the middle, with a tube

tube for the ſmoke, carried from it through one of the ſide-walls. On firſt entering the room, the mercury, in a thermometer which had been ſuſpended there, ſtood above the 150th degree. In this heat the gentlemen remained upwards of twenty minutes, and returned again ſome hours thereafter, when the heat was increaſed to the 198th degree. As it was found, however, that the heat ſoon diminiſhed by ſo many people being admitted at the ſame time, it was agreed that only one perſon ſhould go in at a time. Soon afterwards Dr Solander entered the room alone, when the mercury ſtood at 210°, but, during three minutes that he remained in it, it ſunk to 196°. Mr Banks cloſed the whole, by going in when the thermometer ſtood above 211°. He remained ſeven minutes, in which time the quick-ſilver had ſunk to 198°. The air heated to theſe high degrees felt unpleaſantly hot, but was very bearable; the moſt uneaſy feeling was a ſenſe of ſcorching in the face and legs; the legs particularly ſuffered very much, by being expoſed more fully than any other part to the body of the ſtove, heated red-hot by the fire within. The reſpiration was not at all affected; it became neither quick nor laborious; the only difference was, the

want of that refreſhing ſenſation which always accompanies a full inſpiration of cool air. Mr Banks ſweated profuſely, but no one elſe. The moſt ſtriking effects that occurred, ſays Dr Blagden, proceeded from our power of preſerving our natural temperature, although placed in a degree of heat greatly ſuperior to it. Whenever they breathed on a thermometer, the quickſilver ſunk ſeveral degrees. Every expiration, eſpecially if made with any degree of violence, gave a very pleaſant impreſſion of coolneſs to the noſtrils; in the ſame manner too, breathing on the fingers cooled them agreeably; and Dr Blagden obſerves, that, on touching his ſide, it felt cold like a corpſe, and yet the actual heat of his body was 98°, about a degree higher than its ordinary temperature. The gentlemen who had been the ſubjects of theſe experiments, felt no diſagreeable effects from them, farther than a ſhaking of the hands, with ſome degree of languor and debility; which however ſoon went off.

In a ſubſequent paper, in the ſame volume of the Tranſactions, we are told by Dr Blagden, that, in ſome other experiments on the ſame ſubject, Dr Fordyce and he had found, that even the 260th degree of Fahrenheit's thermometer could be ſubmitted

mitted to with tolerable eaſe; ſeveral gentlemen having, at different times, gone into the room heated to that degree. And, in order more clearly to evince the fallacy of Boerhaave's experiment, with reſpect to the effects of ſuch high degrees of heat on animals, a bitch, weighing 32 pounds, was ſhut up in the heated room, when the thermometer ſtood at 220°. She remained in it half an hour; and, although the heat during that time had riſen to the 236th degree, the animal ſhewed no other uneaſineſs than panting and holding out its tongue, appeared perfectly briſk and lively on getting into the cold air, and remained ſo at the time the paper was wrote, being more than a month from the time the experiment was made. To prove, ſays Dr Blagden, that there was no fallacy in the degree of heat ſhewn by the thermometer, but that the air which we breathed was capable of producing all the well-known effects of ſuch an heat on inanimate matter, we put ſome eggs and a beef-ſtake upon a tin frame, placed near the ſtandard thermometer, and farther diſtant from the cockle than from the wall of the room. In about twenty minutes the eggs were roaſted quite hard, and in 47 minutes the ſtake was not only dreſſed, but almoſt dry.

Another beef-ſtake was rather overdone in 33 minutes.

Two ſimilar earthen veſſels, one containing pure water, and the other an equal quantity of the ſame water, with a bit of wax, were put upon a piece of wood in the heated room. In one hour and an half, the pure water was heated to 114° of the thermometer, whilſt that with the wax had acquired an heat of 152°, part of the wax having melted and formed a film on the ſurface of the water, which prevented the evaporation. The pure water never came near the boiling point, but continued ſtationary above an hour, at a much lower degree; a ſmall quantity of oil was then dropped into it, as had before been done to that with the wax; in conſequence of which, the water in both came at length to boil very briſkly. A ſaturated ſolution of ſalt water put into the room, was found to heat more quickly, and to a higher degree than pure water, probably becauſe it evaporated leſs; but it could not be brought to boil till oil was added, by means of which, it came into a briſk ebullition, and conſequently had acquired an heat of 230°. Perhaps no experiments hitherto made furniſh more remarkable inſtances of the cooling effect of evaporation

ration than theſe laſt facts; a power which now appears to be much greater than has been commonly ſuſpected.

III.

Experiments on Water obtained from the melted Ice of Sea-water, to aſcertain whether it be freſh or not; and to determine its ſpecific gravity with reſpect to other Water.—Alſo experiments to find the degree of cold, in which Sea-water begins to freeze. By *Mr* Edward Nairne.—Vide *Phil. Tranſactions*, Vol. LXVI. 4to, London.

IT having been ſuggeſted, in a converſation at which Mr Nairne was preſent, that the ice of ſea-water is not freſh; and that, if the ice found near the poles be really ſo, it muſt probably be the ice of freſh water, diſcharged from large rivers in thoſe parts; in order to aſcertain the matter, he inſtituted ſeveral experiments. Theſe experiments ſerved at the ſame time to determine the difference of gravity between the water obtained from melted ice of ſea-water, and of ſea-water itſelf, and for finding the degree of cold, in which the latter be-

gins to freeze. The water made uſe of in theſe experiments was taken up off the north Foreland.

On the 27th January 1776, at ten o'clock in the evening, a jar $3\frac{1}{4}$ inches in diameter, and $6\frac{1}{2}$ inches deep, was filled with ſea-water, and expoſed to the open air, the thermometer ſtanding at 15°. On taking it in next day at noon, it was found frozen very hard, except a very little at the bottom, which remained quite fluid; it was then ſet by a ſtove of 56° to thaw. When the jar had continued in that degree of heat, about eight hours, the ice was found to meaſure about $3\frac{1}{2}$ inches in length, and two in diameter. In order to clear it from any of the brine that might adhere to it, it was waſhed in a peal of pump water, and then ſet in a ſieve to drain off the water it had been waſhed in. On the 29th of January, the before-mentioned ice was ſet in a baſin in a heat of 46°, in which it continued nine hours before the whole was diſſolved; the bulb of a thermometer reſted on the ice during the time of the ſolution, and continued without variation at 32°. The water thus obtained, was to the palate perfectly free from any taſte of ſalt.

In

In order to aſcertain the comparative gravity of this water, a bottle was filled with it to a certain mark in its neck, which was very narrow, and the bottle ſo filled was carefully weighed. The ſame bottle was afterwards weighed, filled to the ſame mark in its neck, with ſea-water, and other waters ſucceſſively, which were all brought to the ſame degree of heat by a thermometer. The reſults were,

	Grains.
Water obtained from melted ice of ſea-water	1614
Diſtilled rain water	1612
Water, conſiſting of rain and ſnow waters	1615
Sea-water	1653
Reſiduum of ſea-water, from which the ice before-mentioned had been taken	1659

To find the degree of cold in which ſea-water begins to freeze, the following experiments were made. There was expoſed to the open air, a decanter filled with ſea-water, in which a thermometer was ſuſpended, the bulb of which reached to the middle of the wideſt part of the decanter; a jelly-glaſs, filled with the ſame water, in which alſo a thermometer was put, reſting on the bottom, was placed in the ſame expoſure. The reſult may be ſeen in the following table.

January

January 29. 1776.

Veſſels.	Time.	Immerſed Therm.	Therm. in the open air	Effects, &c.
	h ′			
Decanter, Jelly glaſs,	11 30 A.M.		19	
Decanter, Jelly glaſs,	12 0	33 25 to 28.5	19	A number of beautiful feathered cryſtals appeared in the jelly glaſs; they began to ſhoot from the top, which was covered with ice, towards the bottom; when they reached it, the thermometer roſe immediately from 25 to 28.5.
Decanter, Jelly glaſs,	12 15	31 8.5	19	Ice began to form in the decanter, though hardly perceptible at the edge of the water.
Decanter, Jelly glaſs,	12 20	30 28.5	19	
Decanter, Jelly glaſs,	12 30	29 28.5	19	Cryſtals of a laminated appearance began to ſhoot downwards obliquely from the ice at the ſurface, which at the edge of the water was barely two-tenths of an inch thick; no appearance of ice in the middle of the ſurface.
Decanter,	1 0 P. M.	27.5	19	Cryſtals began to ſhoot round the neck of the decanter cloſe to the glaſs.
Decanter,	1 15	28.5	19	The inſide became covered with finely feathered cryſtals, which made it impoſſible to obſerve the height of the thermometer, without raiſing it till the quick-ſilver in the tube appeared above the ice.
Decanter,	4 0	28.5	19	

January

January 29. at eight o'clock in the evening, were expoſed to the open air two ſimilar jars, each $5\frac{1}{2}$ inches deep and $1\frac{7}{10}$ in diameter; one, for the ſake of diſtinction, may be called A, the other B. A was filled with ſea-water; B with water taken out of a water tub, which was a mixture of rain and ſnow water. In A two thermometers were placed; one reſted on the bottom; the upper part of the ball of the other was a quarter of an inch only below the ſurface of the water; one thermometer was alſo placed in B, reſting on the bottom. The following table ſhews the reſult.

Veſſel.	Time.	Therm. at the top.	Therm. at the bottom.	Therm. in the open air.	
	h ′				
A	8 P.M.	60	60°	19 5	
B			60		
A	8 15	40	33		
B			38		
A	8 20	35	29 5		The ſurface of the water in B covered with ice.
B			37.5		
A	8 25	31	26.5		
B			34		Surface as before.
A	8 30	29	25		No appearance of ice.
B			32		The ice on the ſurface increaſed.
A	8 32	28.5	24.5		Ice began to appear on the ſurface.
B			32		Quite frozen.
A	8 36	28.2	28.5		Cryſtals over every part of the glaſs.
B			32	20	As before.

N. B. During the time in which theſe obſervations were made, the thermometer in the open air roſe half of a diviſion.

The

The following table ſhews the reſult of ſome further obſervations on the effects of cold on the ſea-water in the jar A of the laſt table, which had been thawed in order to be now expoſed again to the open air. The thermometers in the jar continued in the ſame ſituation as before.

January 30. 1776. A. M.

Time.	Therm. at the top.	Therm. at the bottom.	Therm. in the open air.	
h ′				
10 32	34.5	35.5	16.5	The water fluid.
10 39	29.5	32		Ice began to be formed about the glaſs at the edge of the water.
10 42	28.5	30.5		Still continued to have ice only about the edge of the water.
10 48	28	28		The ſurface of the water rendered ſtagnant by the ice.
11 1	27	24.5	18.5	The cryſtals had almoſt reached the bottom.
11 1½	27+	28.5		During the half minute employed in this obſervation, the cryſtals reached the bottom of the jar; the lower thermometer roſe almoſt inſtantaneouſly from 24.5 to 28.5, and was immediately rendered obſcure by the ice.
11 45	26.5	28.5	19	The jar was taken in from the open air, and the lower thermometer lifted out of the ice to a ſufficient height for the obſervation.

From theſe obſervations it ſeems that the freezing point of ſea-water ſhould be fixed in Fahrenheit's ſcale at 28.5.

As

As the water, when it began to freeze in two experiments, exhibited phaenomena different from any formerly obſerved, it may not be improper to ſubjoin an account of them.

At fourteen minutes after eight in the morning of January 31ſt, the jar B, containing the ſame water, viz. a mixture of rain and ſnow water, was ſet in a window; the evening before having placed a ſecond thermometer in it, the bulb of which was juſt below the ſurface of the water. This, as well as the thermometer at the bottom, ſtood at 27.5, and the water was perfectly fluid; The thermometer placed near the jar within the window was at 23.5. At twenty-ſeven minutes after eight, it began to freeze at the bottom of the jar, the thermometers at the top and bottom ſtanding alike at 27°. The inſtant the cryſtals began to encompaſs the ball of the thermometer below, which they very ſoon did after it began to freeze, the quickſilver roſe in it to 32°, the upper one continuing at 27°. The cryſtals continued to ſhoot upwards, and, in leſs than half a minute, reached the bulb of the thermometer at the ſurface, which immediately roſe to 32°.

At

At ten minutes before ſix in the evening of the ſame day, the jar A of the ſecond table was placed in the open air, its contents the ſame, viz. ſea-water. The thermometers in it were likewiſe the ſame, not having been moved; they both ſtood at 34°; that in the open air at 19.5. At ſix o'clock the thermometer above was at 31°, that below at 28.5. At this time ſome ice was diſcovered on the ſurface of the water; but, as it was by candle-light, its firſt appearance could not be diſcerned. At ten minutes after ſix, the thermometer above was at 29°, that below at 26.5. At fifteen minutes after ſix, the upper thermometer at 28.5, that below at 25. At ſeventeen minutes after ſix, both the thermometers ſtood at 28.5; cryſtals having riſen from the bottom covered the ball of that below, on which it roſe inſtantly from 25° to 28.5. The thermometer in the open air continued as at firſt, viz. at 19.5.

The ſcale of all the thermometers uſed in theſe experiments was Fahrenheit's.

IV.

IV.

An Eſſay on the Nature and Cure of the (ſo called) Worm Fever. By Samuel Muſgrave, M. D. F. R. S. &c. 8vo, London.

DR MUSGRAVE introduces his ſubject by obſerving, that the worm fever, as it is called, is a diſorder to which children are generally liable, and that it very frequently eludes the ſkill of the phyſician. He concludes, therefore, that it will not be unacceptable to the public, if he ſhall lay before them a method of treating that diſeaſe, which, in ſeveral inſtances of his own practice, has been attended with ſucceſs; and which, from the immediate relief it gives the patients, he concludes to be ſpecifically adapted to the cure of it, and not ſucceſsful by accident only.

The difficulty of curing what is called a worm fever, ariſes, according to our author, from its being frequently attributed to worms, when the cauſe of the diſorder is of a quite different nature. He does not mean to deny, that worms do ſometimes abound in the human body, nor that

that the irritation cauſed by them does ſometimes produce a fever; but he apprehends theſe caſes to be much more uncommon than is generally imagined, and that great miſchief is done by treating ſome of the diſorders of children as worm caſes, which really are not ſo. Dr Hunter, it is obſerved, is of the ſame opinion on this point, and he has, we are told, diſſected great numbers of children who have been ſuppoſed to die of worm fevers, and whoſe complaints were of courſe treated as proceeding from worms, in whom, however, there appeared, upon diſſection, to be not only no worms, but evident proofs of the diſorder having been of very different natures.

The ſpurious worm fever, as Dr Muſgrave terms it, has, in all the inſtances he has ſeen of it, ariſen evidently from the children having been indulged with too great quantities of fruit; though a poor cold diet may, he thinks, occaſionally give birth to it. Every ſort of fruit eaten in exceſs will probably produce it; but an immoderate uſe of cherries ſeems to be the moſt common cauſe of it. The approach of this diſorder has a different appearance, according as it ariſes from a habit of eating fruit in rather too large

large quantities, or from an exceſſive quantity eaten at one time. In the former caſe, the patient gradually grows weak and languid; his colour becomes pale and livid; his belly ſwells and grows hard; his appetite and digeſtion are deſtroyed; his nights grow reſtleſs, or, at leaſt, his ſleep is much diſturbed with ſtartings, and then the fever ſoon follows; in the progreſs of which, the patient grows comatoſe, and at times convulſed; in which ſtate, when the event is fatal, he dies. The pulſe at the wriſt, though quick, is never ſtrong or hard; the carotids, however, beat with great violence, and elevate the ſkin ſo as to be diſtinctly ſeen at a diſtance. The heat is at times conſiderable, eſpecially in the trunk; though at other times, when the brain is much oppreſſed, it is little more than natural. It is ſometimes accompanied by a violent pain of the epigaſtric region, though more commonly the pain is ſlight, and terminates in a coma; ſome degree of pain, however, ſeems to be inſeparable from it, ſo as clearly to diſtinguiſh this diſorder from other comatoſe affections.

Where a large quantity of fruit has been eaten at once, the attack of the diſorder is inſtantaneous, and its progreſs rapid; the patient often

paſſing, in the ſpace of a few hours, from apparently perfect health, to a ſtupid, comatoſe, and almoſt dying ſtate. The ſymptoms of the fever, when formed, are in both caſes nearly the ſame, except that, in this latter ſort, a little purulent matter is ſometimes diſcharged, both by vomit and ſtool, from the very firſt day. The ſtools, in both caſes, exhibit ſometimes a kind of curd reſembling curdled milk, at other times a floating ſubſtance is obſerved in them, and ſometimes a number of little threads and pellicles, and now and then a ſingle worm.

Strong purgatives, or purges frequently repeated in this diſorder, are greatly condemned by our author, as they in general not only aggravate the ſymptoms already preſent, but are ſometimes the origin of convulſions. Bloodletting is not to be thought of in any ſtage of the diſorder.

Although frequent purging, however, is not recommended, yet a ſingle vomit and purge are adviſed in the beginning of the diſorder, with a view to evacuate ſuch indigeſted matter and mucus as happens to remain in the ſtomach and bowels. Theſe having operated properly, there is ſeldom occaſion for repeating them; and it is ſufficient,

ſufficient, if the body be coſtive, to throw up, every ſecond or third day, a clyſter, compoſed of half a dram of aloes, diſſolved in five ounces of infuſion of chamomile.

The principal part of the cure, however, depends upon external applications to the bowels and ſtomach; and, as the cauſe of the diſorder is of a cold nature, the applications muſt be warm, cordial, and invigorating; and their action muſt be promoted by conſtant actual heat. The following is the form recommended. ℞ Fol. abſinth. et rutae, āā p. aeq. aq. pur. q. ſ. F. decoctum ſaturatiſſimum, quo calide foveatur regio ventriculi et abdomen, quarta vel quinta quaque hora, per horae quadrantem. Magma ex herbis coctis poſt fotus uſum iiſdem partibus perpetuo appoſitum teneatur, et quoties refrixerit, aliud calidum opponatur. For internal uſe, the following is all that has been found neceſſary. ℞ Aq. cinnam. ſpt. cinnamon. ten. āā ʒſs, ol. amygdal. dulc. ʒiſs. ſyr. balſamic. drachm. iii. M. et tempore uſus fortiter concutiantur in phiala. Capiat, pro ratione aetatis, drachm. ii. ad ʒvi. ʒtia quaque hora.

When any nervous ſymptoms come on, or remain after the diſorder is abated, they are eaſily

removed by giving a pill of four grains of aſſa foetida once or twice a-day.

The diagnoſtics of worms are very uncertain; but even in real worm caſes, the treatment above recommended would, it is imagined, be much more efficacious than the practice commonly had recourſe to. As worms either find the conſtitution weakly, or very ſoon make it ſo, the frequent repetition of purges, particularly mercurials, cannot but have a pernicious effect. Baresfoot is ſtill more exceptionable, being in truth to be ranked rather among poiſons than medicines. Worm-ſeed and bitters are too offenſive to the palate and ſtomach to be long perſiſted in. The powder of corraline creates diſguſt by its quantity; and the infuſion of pink root is well known to occaſion now and then vertiginous complaints and fits.

Fomenting the belly night and morning with a ſtrong decoction of rue and wormwood, is much recommended. It is a perfectly ſafe remedy, and, by invigorating the bowels, has thereby a conſiderable influence in rendering them capable of expelling ſuch worms as they happen to contain. After the fomentation, it is adviſed to anoint the belly with a liniment, compoſed of one part of eſſential

eſſential oil of rue, and two parts of a decoction of rue in ſweet oil. Of internal medicines, the beſt is aſſa foetida, with an aloetic pill or two at proper intervals.

The diet of children diſpoſed to worms, ſhould be warm and nouriſhing, conſiſting in part at leaſt of animal food, which is not the worſe for being a little ſeaſoned. Their drink may be any kind of beer that is well hopped, with now and then a ſmall draught of porter or negus. A total abſtinence from butter is not ſo neceſſary, perhaps, as is generally imagined. Poor cheeſe muſt by all means be avoided; but ſuch as is rich and pungent, in a moderate quantity, is particularly ſerviceable. In the ſpurious worm fever, the patient ſhould be ſupported occaſionally by ſmall quantities of broth; and, at the cloſe of it, when the appetite returns, the firſt food given ſhould be of the kinds above recommended.

The diet here directed will, perhaps, be thought extraordinary, as the general idea is at preſent, that, in the management of children, nothing is ſo much to be avoided as repletion and rich food. It is no doubt an error to feed children too well, or to indulge them with wine and rich ſauces; but it is equally an error to confine them to too

ſtrict or too poor a diet, which weakens their digeſtion, and renders them much more ſubject to diſorders of every kind, but, particularly, to diſorders of the bowels. In regard to the ſpurious worm fever, if it be true that acid fruits too plentifully eaten, are the general cauſe of it, it follows as a conſequence, that a warm nutritious diet, moderately uſed, will moſt effectually counteract the miſchief, and ſooneſt reſtore the natural powers of the ſtomach. Beſides, if the diſorder does not readily yield to the methods here directed, as there are many examples, and ſome have happened to our author, of its terminating by an inflammation, and ſuppuration of the navel, it is highly adviſeable to keep this probability in view, and, by a moderate allowance of animal food, to ſupport thoſe powers of nature, from which only ſuch a happy criſis is to be expected.

V.

De Cicutæ efficacia, V. Noſocomii civici Pazmanniani Annus Medicus Tertius, ſive Obſervationum circa Morbos Acutos et Chronicos, ab Henrico Joſepho Collin, *Medico Viennenſe, et ejuſdem Noſocomii Phyſico Factarum.* 8vo, Vindobonæ.

IN conſequence of the celebrated Stork's publications on the virtues of hemlock, innumerable trials were made of it in this, as well as in other countries. It did not, however, in any degree, anſwer the expectations formed of it; ſo that many practitioners began long ago to conclude, either; that more had been ſaid upon the efficacy of the medicine than in reality it deſerved; or, that the preparations of it uſed in this country, differed materially from thoſe made uſe of at Vienna. That the latter conjecture was the moſt probable, no perſon could doubt who had peruſed, and given credit to Stork's publications; and, in the treatiſe before us, are related a variety of caſes, moſt of which tend equally to the confirmation of the ſame opinion. For more full information, the treatiſe itſelf muſt be had

recourſe to; all of the moſt remarkable caſes, however, are here ſelected.

Caſe III. A woman, aged 27 years, had, for a year and half, laboured under a total want of uſe of her right leg, owing to a conſiderable hard ſwelling around the knee joint. This diſorder ſhe imagined to be the remains of a goutiſh complaint, which, for the ſpace of three weeks, ſhe had formerly been troubled with. In other reſpects ſhe enjoyed good health.

A purgative being premiſed, ſhe began, on the 4th of Auguſt, to the uſe of cicuta; ſixteen grains of the extract were ordered twice a day, together with an external application of the plant, in the form of a fomentation, to the part affected.

On the 8th of Auguſt, three doſes a day, of ſixteen grains each, were preſcribed: Theſe were continued daily till the 24th, when each doſe was ſo much increaſed, as that a dram of the extract came to be exhibited every twenty-four hours.

5th September, This day the patient perceived a tingling kind of pain in the ſwelling; there was no difference, however, in it as to ſoftneſs; but the joint, though formerly ſtiff and rigid, became now, in ſome degree, moveable.

10th,

10th, The knee ſomewhat ſofter, and the motion of the leg more conſiderable.

She was afterwards gently purged two or three times, and continued taking two doſes of cicuta, of a ſcruple each daily, till the 23d of October, when the ſwelling was entirely removed, and a free uſe of the joint reſtored. For a debility of that leg, which remained for ſome time, a fomentation of aromatic herbs was preſcribed, which ſoon effected a complete cure, and the patient has ſince that time, we are told, remained perfectly well.

Caſe X. A man, aged 40, was brought to the hoſpital, with a large ſcorbutic ulcer on the outer part of his right leg; the diſeaſe was of a twelvemonth's ſtanding, and, beſides the ulcer, the under part of the leg was ſo much ſwelled as to form one continued hard tumor, from that downwards over the whole foot. For the ſpace of three months, all the remedies commonly had recourſe to in ſuch caſes, were adminiſtered, but with no evident advantage. It was reſolved, therefore, to ſee what effects cicuta would produce.

On the 19th of November, he began to take ſixteen grains of the extract, twice a day; and linen cloths ſoaked in an infuſion of the herb, were

were kept conſtantly applied to the ſore. At this time, the ſwelling of the leg and foot were equally conſiderable as when the patient was firſt admitted; the ulcer, however, had ſpread farther; its margins were ragged, and from the bottom of the ſore, ſeveral ſmall tubercles had ariſen. The colour of the parts affected was various, the matter afforded was ſanious, and the patient complained of very ſevere pains. In other reſpects, however, he enjoyed good health. By the 27th of the month, the ſore looked much better, had got a more natural red appearance, the inequalities in the bottom were diminiſhed, and the leg and foot were not ſo tenſe as formerly.

On the 6th of December, the ſore was conſiderably filled up; in place of ſanies, thin pus was now diſcharged, the ſwelling was much leſſened, and the patient complained of little or no pain. The ſame treatment was continued till the 20th of the month, when the ſore was ſo far reduced as to afford only a very ſmall quantity of pus. Its margins were become equal, and ſhewed a tendency to cicatrize, and the ſwelling of the leg and foot was entirely removed.

At this time, the remedies, which had till then been continued, were laid aſide; and the only application

application made uſe of, was a plaſter of cicuta to the ſore. The patient had all along taken a laxative every ſixth or ſeventh morning. By the middle of January, the ſore was completely and firmly cicatrized; and the patient was in every reſpect ſo well by the end of the month, as to be then diſmiſſed, and allowed to go to his ordinary labour.

Caſe XI. A woman, aged thirty, laboured under a hard ſchirrous tumor of the left breaſt; the ſwelling was of a livid colour, and ſo conſiderable in ſize, as to render that breaſt three times as large as the other; the pain attending it was ſo violent as to render reſpiration very difficult. The patient, at the time of applying for aſſiſtance, was much emaciated, had a very ſickly complection, and her ſtrength was ſo much impaired, as to give very ſmall hopes of a cure being obtained.

In this ſituation ſhe was ordered an anodyne, together with a decoction of ſarſaparilla; as likewiſe the following mixture: ℞. Aq. flor. rhaead, ℥vii.; extract. cicut. ʒi.; ſyr. diacodiae ʒiſs. m. cochlearia ii. omni bihorio ſumend. At the ſame time, a decoction of cicuta was frequently applied as a fomentation to the breaſt. By the following day, the

the pain was conſiderably relieved, and the patient ſlept a little, at intervals. On the 7th day, ſmall ulcers broke out in different parts of the breaſt, diſcharging large quantities of very acrid ſanies. The bottom and lips of the ulcers were of a leaden colour; the pains were not ſo conſtant, but the patient now complained of a burning heat, which ſhe had not formerly done. Hitherto ſhe had taken at the rate of a dram of extr. cicutae in the twenty-four hours; but, as it ſeemed to agree well with her, the quantity was now doubled. The decoction of ſarſa. without the anodyne, was continued, and externally was applied, empl. de cicuta, together with the fomentation formerly mentioned. Theſe remedies produced ſuch remarkable good effects, that, in leſs than three months, ſeveral hard glands, which in the courſe of treatment had been diſcovered in the arm-pit, were rendered ſoft, and the different ulcers ſo far cicatrized as to render farther uſe of cicuta unneceſſary. To this remarkable cure, many of the faculty at Vienna, we are told, were witneſſes, particularly Dr Stork and Mr Gaſſer profeſſor of anatomy there.

Caſe XIII. A boy thirteen years of age had laboured under a white ſwelling in the joint of his

his left knee, for the ſpace of ſix months. Different remedies had been tried, but with no advantage; it was therefore reſolved to ſee what effects would be produced by cicuta. The extract was ordered, internally, in the form of pills, and a fomentation was applied outwardly. Theſe were the only medicines preſcribed, except a gentle purge, repeated at proper intervals. They were employed for the firſt time on the third February; by the 21ſt of the month, the ſwelling was much ſoftened, and, by the 1ſt of March, it was in every reſpect conſiderably better. On the 23d of April he was diſmiſſed perfectly cured.

Caſe XXXV. A boy, aged eleven years, had, for ſix months, laboured under a very bad ſpecies of tinea capitis. During the firſt ſix weeks after his admiſſion to the hoſpital, a variety of remedies were had recourſe to, with no advantage, and at laſt he was put upon a courſe of cicuta, both internally and externally. Sixteen grains of the extract were exhibited twice a day, and the head was waſhed twice a day with the decoction of the plant. No other medicine was preſcribed, excepting a gentle laxative now and then, and, in

leſs

although it frequently failed in effecting complete cures, yet it almoſt always tended to mitigate the pains, and to convert the ſanies uſually diſcharged from ſuch ſores, into matter of a more bland purulent nature.

VI.

De uſu noxio et ſalubri Veſicantium. Vid. Solomonis Theophili de Meza, M. D. *Diatribae Medicae tres.* 8vo, Hafniae.

AFTER a ſhort account of the natural hiſtory of cantharides, the chemical analyſis of theſe inſects, and the phaenomena commonly obſerved from their application, our author proceeds to conſider with what propriety they are had recourſe to, in ſeveral diſorders, in which they are very generally uſed.

The uſe of bliſters in convulſive diſeaſes is firſt taken notice of; and Mr de Meza obſerves, that in all ſuch complaints they will be ſerviceable or hurtful, according to the particular nature and occaſional cauſe of the diſeaſe. Convulſions, he thinks,

thinks, may proceed from three different ſets of cauſes, viz. from repletion, inanition, and irritation. When repletion from too great a quantity of blood ſeems to be the cauſe of the diſorder, veneſection ſhould always precede the uſe of bliſters, and then they are frequently of ſervice. In repletion, too, from a ſuperabundancy of ſerum, they are the principal remedy to be depended on.

In convulſions proceeding from the ſecond ſet of cauſes, inanition, our author does not think bliſters can ever be applicable: For, if the inanition has been induced, either by too great diſcharge of blood or ſerum, farther evacuations by epiſpaſtics would certainly, he thinks, be adding feuel to the fire, and could not probably anſwer any one good purpoſe. When irritation about the head ſeems to be the cauſe of ſuch diſorders, bliſters, applied to the extremities may ſometimes be of ſervice, by occaſioning a derivation to theſe parts of ſuch humours as may have happened to produce them.

VERTIGO.

Vertigo, we are told, may proceed from ſix different cauſes, viz. 1. From a ſanguineous plethora.

2. From a foulneſs in the primae viae. 3. From debility in conſequence of exceſſive evacuations. 4. From compreſſion. 5. From poiſons of different kinds, as opium, mercury, fumes of charcoal, &c.; and, 6. From a ſeroſa colluvies, in conſequence of the ſtoppage of iſſues, ulcers, or any other habitual drains. In this laſt ſpecies of the diſeaſe, bliſters are much recommended; but, in none of the others, can they ever, we are told, be uſed with advantage.

APOPLEXY.

Very different opinions are delivered, by different authors, with reſpect to the uſe of bliſters in apoplectic and the ſeveral comatoſe diſorders; by ſome they are much recommended, and by others we are defired to uſe them with the greateſt caution. In order to reconcile theſe oppoſite opinions, the different cauſes that may be ſuppoſed to produce apoplexy are here enumerated. 1. Such diſorders are frequently induced by plethora, and congeſtions of blood about the head. 2. By pituitous and ſerous collections in the head. 3. By compreſſion of the jugular veins. 4. By ſanguineous and ſerous extravaſations in the ventricles of the brain. 5. By the tranſla-

tion

tion to the head of the different excretions, on theſe being unnaturally retained in the ſyſtem. 6. By narcotics and opiates; and, 7. By ſympathy from other diſeaſes.

In apoplexy from a ſanguineous plethora, bloodletting is recommended as almoſt the only remedy to be depended on; and, in that ſpecies of the diſorder, bliſters are never admiſſible till conſiderable quantities of blood have been drawn off. The third ſpecies of cauſes enumerated may ſometimes, we are told, though not often, be removed by a chirurgical operation. Extravaſations in the ventricles of the brain commonly prove fatal, though, in ſome inſtances, draſtic purgatives have appeared to be of ſervice in ſuch caſes. Poiſonous narcotics are moſt effectually removed by emetics; and vinegar, we are told, is the beſt corrector of an over-doſe of opium. Apoplexy that appears to proceed from any other diſorder, muſt be cured by medicines moſt proper for the removal of the original diſeaſe. From what has been ſaid, it would appear, that the uſe of bliſters in apoplexy is very limited; and they are recommended by our author, in ſuch caſes only as ariſe, either from a ſuperabun-

dancy of ſerum in the conſtitution, or from a tranſlation to the brain of ſuch humours as in a ſtate of health ought to be excreted.

PALSY.

When in palſy a plethoric ſtate of the ſyſtem takes place, bliſters, our author thinks, can never, with ſafety, be had recourſe to; but, in all ſuch diſorders as are connected with, or ſeem to depend upon a relaxed ſet of fibres, a moiſt atmoſphere, or the preſence of too much ſerum in the ſyſtem, bliſters are then the principal remedies to be depended on. They are likewiſe of ſervice, too, in ſuch ſpecies of palſy as are produced by poiſons of different kinds, eſpecially thoſe of a metallic nature; but, in theſe caſes, the uſe of ſtrong emetics and purgatives muſt always be premiſed.

DELIRIUM.

As our author elſewhere treats of delirium when conjoined with the putrid and nervous fevers, his obſervations upon it here are confined to the phrenitis and hydrophobia.

In phrenitis, after plentiful evacuations of blood, bliſters are much recommended, not, however,

however, to the head, but to the extremities; for, as in all such cases, there evidently appears to be a great determination to the head, whatever can occasion a derivation to the extremities, will most likely be of service; and this our author alledges may, in some measure, be effected by blisters. In real cases of hydrophobia, no remedies whatever can probably be of much service; but, as it is of consequence to preserve the parts bit by mad animals as long open as possible, blisters for that purpose are said to answer very effectually.

DOLOR.

The first case of pain instanced by our author, is headach. Of this complaint he says there are three distinct species. 1. The idiopathic, proceeding from some fixed cause in the brain itself; this he considers in general as incurable. 2. The symptomatic, proceeding most commonly from some disorder in the stomach; this, he says, must be cured by emetics, and other remedies most proper for the original disease. 3. The metastatic, arising from a translation of serum, or other matter, to the head, from different parts of the body. In this species of headach, together with

pediluvia, are recommended bliſters both to the neck and thighs.

In pains of the ears, attended with purulent or ſerous diſcharges, bliſters may frequently be of uſe; but, for the removal of pain only, as it commonly, in theſe caſes, proceeds from inflammation, bloodletting is more warmly recommended. In toothach, our author does not imagine bliſters can ever be of much ſervice; for, when inflammation is the cauſe of the pain, nothing will ſo effectually relieve it as bloodletting; and pain from a caries tooth can only be removed by extraction of the tooth itſelf. In rheumatic pains of the joints, bliſters, applied to the parts affected, are often known to prove efficacious. In ſuch pains as are frequently connected with fouvy, we are deſired never to uſe them, as the bliſtered parts are very apt to mortify; but, in pains proceeding from a repulſion of ſcabies, or itch, nothing, we are told, proves ſo effectual. A caſe is here ſtated of an intenſe pain along the arm, which reſiſted all the ordinary applications, and was cured by the application of bliſters only, after it was ſuſpected to proceed from the diſappearance of an inveterate itch.

In

In arthritic pains, whether of the head, breaſt, or ſtomach, bliſters, as ſtimulants, are much recommended by our author, either to the feet, or to ſuch parts of the extremities as the diſeaſe has formerly been ſeated in.

Such pains as proceed from ſome ſpecies of colic, particularly from the colica pictonum, may, we are told, be frequently relieved by the application of bliſters to the part affected.

INFLAMMATIONS.

A variety of diſeaſes, attended with topical inflammation, are here enumerated, in which bliſters are much recommended; particularly, ophthalmia, angina, peripneumony, pleuriſy, inflammatory affections of the diaphragm, ſtomach, &c.

DISEASES OF THE BREAST.

Aſthma is the diſorder firſt taken notice of under this head. In the moiſt or humeral aſthma, bliſters are ſaid to be of uſe, both as evacuants, and as ſerving to derive from the part affected, towards the ſituation on which they are applied. They are not, however, recommended in any other ſpecies of the diſeaſe. In coughs, attended with tough viſcid expectora-

tion, bliſters are adviſed to be had recourſe to; but, on no account, ought they to be uſed in coughs of a more dry nature. In chincough, after the uſe of vomits, gentle laxatives, and pectorals, bliſters to the back are recommended as uſeful.

DROPSY.

Mr de Meza does not imagine that bliſters can ever be of ſervice in any of the encyſted or internal ſpecies of dropſy; but they are uſed, he ſays, with advantage, in what he terms the external hydrocephalus, viz. in ſuch watery ſwellings of the head as are confined to the common teguments. In all ſuch diſorders of the eyes as are attended with plentiful ſecretions of tears, bliſters are much recommended by our author.

CUTANEOUS DISEASES.

In obſtinate caſes of impetigo and ſcabies, bliſters, applied even to the affected parts, have been attended, we are informed, with the greateſt advantage. A caſe is here related, of a very inveterate inſtance of impetigo in a young lady, which, after reſiſting all the uſual remedies, was ſpeedily cured by the application of a large bliſter to the parts

parts principally affected. The bliſtered part was kept open for about a fortnight, by means of iſſue-ointment; and the cure was ſo complete, that no veſtige of the diſeaſe could afterwards be obſerved.

FEBRILE DISORDERS.

Fevers are the laſt claſs of diſeaſes taken notice of in the treatiſe before us. In fevers of the intermittent kind, except when ſymptoms of a comatoſe nature occur, bliſters are very ſeldom ſaid to be neceſſary. Nor are they adviſeable in the ardent inflammatory fever, till after repeated bloodlettings, and other neceſſary evacuations. In putrid fevers, when ſtimulants are requiſite, bliſters are recommended as the moſt effectual; in ſuch diſorders, however, they ſometimes, we are told by our author, terminated in mortification. In every ſtage of the nervous fever, bliſters are much extolled by Mr de Meza, not only as ſtimulants, but as ſolvents of that viſcid ſtate of the fluids, on which ſuch fevers are by many ſuppoſed to depend. In the meaſles, bliſters are ſeldom neceſſary, excepting with a view to moderate the cough, which frequently, towards the end of the diſeaſe, becomes the moſt troubleſome ſymptom.

ptom. Neither are they often thought requiſite by Mr de Meza, in the ſmall pox; he ſpeaks, however, of his having frequently ſeen them of conſiderable ſervice in the ſecondary fever of the confluent kind; and a caſe is related, in which, bliſters applied to the legs produced a very ſpeedy cure, after the cool regimen had failed, although attended to, from the commencement of the diſeaſe, with the greateſt exactneſs.

VII.

A Diſcourſe upon ſome late Improvements of the Means for preſerving the Health of Mariners, delivered at the anniverſary Meeting of the Royal Society, Nov. 30. 1776. *By Sir* John Pringle, *Baronet, Preſident. Publiſhed by their order.* 4to, London

THE endeavours uſed by Captain Cook, in his late voyage round the word, for preſerving the health of his ſailors, were ſo remarkably ſucceſsful, as to induce the royal ſociety, at their anniverſary meeting in November laſt, to confer upon him Sir Godfrey Copley's medal; the ſociety

ciety having no hesitation in pronouncing Captain Cook's paper on the subject, the most deserving of any which, for the year, had come before them. It was on this occasion, that the present discourse was delivered, with a view, we are told, of explaining more fully the means employed by Captain Cook, than he himself had leisure to do in his paper; and, as all the information contained in this discourse, was either obtained directly from the Captain himself, or from some of his most intimate friends, since his departure on his present voyage, every circumstance related in it must be considered, therefore, as exceedingly valuable. Captain Cook sailed in his Majesty's ship the Resolution, with a company of a hundred and eighteen men, and performed a voyage of three years and eighteen days, throughout all the climates, from fifty-two degrees north, to seventy-one degrees south, with the loss of only one man by a disease; and even that man, we are informed in a note, began so early to complain of a cough, and other consumptive symptoms, that his lungs must have been affected before he went abroad.

In order to set in a more striking point of view the advantages of the late improvements for preserving the health of mariners, Sir John Pringle here

here enumerates ſome of the many dreadful cataſtrophes, which, in former times, univerſally attended long voyages at ſea, and even at ſuch a late period as the voyage performed by Lord Anſon. The conſequences of ſuch attempts were ſo lamentable, as to make every reader reflect, with regrete, upon the want ſea-faring people then laboured under with reſpect to nautical medical aſſiſtance; and in which branch of the art, we are now happily poſſeſſed of ſuch very uſeful experience, that a voyage round the world, we are told, may be undertaken with leſs danger to health, than a common tour in Europe.

Before proceeding to enumerate the means fallen upon by Captain Cook for preſerving the health of his ſailors, we are favoured, by our author, with ſome obſervations on the nature of ſcurvy; it being the diſeaſe to which ſeamen are moſt remarkably expoſed, and which they, on every occaſion, ſhould guard moſt particularly againſt.

The ſcurvy has, by ſome, been attributed to the coldneſs of the air, which checks perſpiration; and it is ſaid, therefore, to be the epidemic diſtemper of the northern nations, and particularly of

of thoſe around the Baltic. Sir John Pringle, however, is of opinion, that, in theſe countries, ſcurvy is produced almoſt entirely from the inhabitants being forced to live on ſalt proviſions for at leaſt one half of the year; from their having few or no greens nor fruit in the winter, little fermented liquors, and living in damp, foul, ill-aired houſes. And that it is not the coldneſs of a climate which occaſions this diſeaſe, is rendered evident, by its being never known among the Laplanders, one of the moſt northerly nations; theſe people being probably preſerved from it, by their not being obliged, at any time, to live upon ſalted proviſions, as they are always plentifully ſupplied with freſh fleſh by their rain-deer.

All the ſeveral occaſional cauſes of ſcurvy, as well thoſe above mentioned as others, tend greatly to induce a ſeptic reſolution, or beginning corruption of the whole habit, which our author, in a former publication, long ago endeavoured to eſtabliſh as the immediate cauſe of the diſeaſe; and on this point he is ſtill of the ſame opinion. He is confirmed in it from a variety of circumſtances, but, particularly, from finding, on examination, that, from whatever in nautical practice has either of old been approven, or of late been introduced

troduced into the navy, it appears, that, though the means vary in form, and in their mode of operating, yet they all ſome way contribute towards preventing putrefaction, whether of the air in the cloſer parts of a ſhip, of the meats, of the water, of the cloaths and bedding, or of the body itſelf.

The firſt thing taken notice of by Captain Cook in his liſt of ſtores, is malt, of which was made ſweet wort, and given not only to thoſe who had manifeſt ſymptoms of the ſcurvy, but to ſuch alſo as were judged to be moſt liable to it, in the quantity of two or three pints a day, to each man, or in ſuch proportion as the ſurgeon thought neceſſary, which ſometimes amounted to three quarts in twenty-four hours. Its effects were ſo remarkable as to make it to be conſidered by Captain Cook, as one of the beſt antiſcorbutic ſea-medicines yet found out. Our author is of opinion with Doctor M'Bride, that it is to the fixed air afforded by the wort, that all its virtues are to be attributed; and, in confirmation of the theory, mentions ſeveral articles which are known to contain great quantities of fixed air, and which are all eſteemed as powerful antiſcorbutics. Wine, cyder, and other vinous productions

tions from fruit, as alſo the various kinds of beer, are all known to be uſeful in this reſpect, inſomuch, that it is a conſtant obſervation, we are informed, that, in long cruizes, the ſcurvy is never ſeen while the ſmall beer holds out at full allowance, but that, when, it is all expended, the diſorder ſoon appears. It were to be wiſhed, therefore, our author obſerves, that this wholeſome beverage could be renewed at ſea; but our ſhips afford not ſufficient conveniency. The Ruſſians, however, he informs us, prepare, at ſea as well as land, a liquor of a middle quality between wort and ſmall beer, in the following manner: They take ground malt and rye-meal in a certain proportion, which they knead into ſmall loaves, and bake in the oven. Theſe they occaſionally infuſe in a proper quantity of warm water, which begins ſo ſoon to ferment, that, in the ſpace of twenty-four hours, their beverage is compleated, in the production of a ſmall, briſk, acidulous liquor, which they call *quas*, palatable to themſelves, and not diſagreeable to the taſte of ſtrangers. On the authority of the late Dr. Mounſey, who had the beſt opportunities of knowing, we are informed, that quas is the common drink, both of the fleets and armies of the Ruſſian empire;

pire; that it is particularly good againſt ſcurvy; and that, although he had been at pains to inquire both at Moſcow and St Peterſburg, to diſcover ſome inſtances of the jail-fever, he could not, in the ſeveral priſons of theſe large cities, (although they were full of malefactors), find that ſuch a diſtemper was ever known among them. He could diſcover no other reaſon for the healthful condition of theſe men, than the kind of diet they uſed, which was the ſame with that of the common people of the country, who not being able to purchaſe fleſh meat, live moſtly on rye-bread, and drink quas.

From the above information, ſays our author, it would appear, that rye-meal aſſiſts both in quickening the fermentation, and adding more fixed air, ſince malt alone could not ſo readily produce ſo acidulous and briſk a liquor. And there is little doubt, he thinks, that, whenever the other grains can be brought to a proper degree of fermention, they will more or leſs in the ſame way become uſeful. That oats will, he is ſatisfied from a piece of intelligence he obtained from the Captain of a large ſhip of war, who, being on a cruize, and the ſcurvy breaking out among his men, put them upon a kind of food

which

which he had, in ſome parts of the country, ſeen uſed, and which he thought might be of ſervice on that occaſion. This food in the north is called *ſooins*, and is prepared in the following manner. Some oat-meal is put into a wooden veſſel, hot water is powered upon it, and the infuſion continues, till the liquor begins to taſte ſouriſh, that is, till a fermentation comes on, which, in a place moderately warm, may be in the ſpace of two days. The water is then poured off from the grounds, and boiled down to the conſiſtence of a jelly. This he ordered to be made, and dealt out in meſſes, being firſt ſweetened with ſugar, and ſeaſoned with ſome priz.-wine he had taken, which turned ſour, yet improved the taſte, and made this aliment no leſs palatable than medicinal. Upon this diet chiefly, and abſtaining from ſalted meats, the ſcorbutic ſick quite recovered on board; and not in that voyage only, but in all his ſubſequent cruizes during the late war, without his being once obliged to ſend any of them on ſhore, becauſe they could not get well at ſea.

Although it is probably to the fixed air, contained in fruits, greens, and fermented liquors, that their efficacy in ſcurvy is in a great meaſure

to be attributed; yet the acid which enters their ſeveral compoſitions, is by our author imagined to have no inconſiderable influence. If it be objected to this, that the mineral acids, which contain little nor no fixed air, have been tried in ſcurvy with little ſucceſs, he anſwers, that, in thoſe trials, they have never been ſufficiently diluted, the elixir of vitriol being commonly given in ſuch ſmall quantities of water, that it is not probable ſuch an auſtere drink can ever get beyond the firſt paſſages, conſidering the delicate ſenſibility of the mouths of the lacteals. He therefore propoſes, that, on a deficiency of malt at ſea, ſuch men as are threatened with ſcurvy, ſhould be ordered to drink three quarts of water in the day, acidulated in the proportion of ten drops of ſpirit of ſalt to to each quart, or of thirteen drops of weak ſpirit of vitriol to the ſame meaſure. Captain Cook, when ſpeaking of the effects of the rob of lemons in ſcurvy, does not ſay much in its favours; owing, as our author conjectures, to his having been deſired to give it out in ſuch ſmall quantities as could not readily produce any good effects.

The wort and acid juices were only diſpenſed as medicines, but the next article was of more extenſive

extenſive uſe, viz. the ſour kraut, (ſour cabbage) a diſh of univerſal requeſt in Germany. The acidity is acquired by its ſpontaneous fermentation, and it was the ſour taſte which made it the more acceptable to all who eat it. To its farther recommendation, it may be added, that it held out good to the laſt of the voyage.

Portable ſoup is another article of which Captain Cook availed himſelf not a little. This concentrated broth being freed from all fat, and having, by long boiling, evaporated the moſt putreſcent parts of the meat, is reduced to the conſiſtence of a glue, which in effect it is, and will, like other glues, in a dry place, keep ſound for years together. It hath been ſaid, that broths turn ſour on keeping, though made without any vegetable. Now, whether any acid be thus formed, may be a queſtion. Our author, however, is inclined to think, that the gelatinous parts of animal ſubſtances, ſuch as compoſe theſe cakes, are not of a nature much diſpoſed to putrify. But, however that may be, ſince Captain Cook obſerves, that this ſoup was the means of making his people eat a greater quantity of greens than they otherwiſe would have done, in ſo far, ſays he, we muſt allow it to have been virtually antiſeptic.

So much for thoſe articles, which of late have been ſupplied to all the King's ſhips on long voyages, and in which, therefore, Captain Cook claims no other merit than the prudent diſpenſation of them; but the following regulations, being either wholly new, or improven hints, from ſome of his experienced friends, he may juſtly appropriate to himſelf.

Firſt, then, he put his people at three watches inſtead of two, (which is the general practice at ſea) that is, he divided the whole crew into three companies, and, by putting each company upon the watch by truns, four hours at a time, every man had eight hours free, for four of duty: Whereas at watch and watch, the half of the men being upon duty at once, with returns of it every four hours, they can have but broken ſleeps, and, when expoſed to wet, they have not time to get dry before they lie down. In the torrid zone, the men were ſhaded from the ſcorching heat of the ſun by a covering over the deck; and when under the antarctic circle, a coat was provided for each man, of a ſubſtantial woolen ſtuff, with the addition of a hood for covering their heads. This garb, termed by the ſailors, their Magellan jacket, was found very comfortable for working

in

in rain and ſnow, and among the broken ice in the high latitudes of the ſouth. The greateſt attention was paid to cleanlineſs; the ſhip's company, one morning in the week, paſſed in review before the Captain, who ſaw that every man had changed his linen, and was, in other reſpects, as clean and neat as circumſtances would permit.

It is now well known to ſeamen, of what conſequence it is to have the hammocks and bedding kept as dry and well-aired as poſſible, inſomuch that every fair day, they are commonly ordered upon deck. In the voyage performed by Captain Cook, they were not only on ſuch days brought upon deck, but every bundle was unlaſhed, and ſo ſpread out, that all the parts of it were expoſed to the air.

With a view to purify the ſhip itſelf, attention was not only given to waſh and ſcrape the decks regularly, as is uſually done, but every part below deck was kept ſweet by means of portable fires. Some wood being put into a proper ſtove or grate, is lighted, and carried ſucceſſively from one part of the ſhip to another; care being taken to retain it ſo long in each apartment, as ſeems neceſſary for driving out the foul air, and

occaſioning an admiſſion of a freſh atmoſphere. Theſe fires, it is apprehended, might be of uſe by the acid ſteams afforded from the wood, which would, probably in ſome degree, act as an antiſeptic; but the moſt obvious advantage accruing from them, was their drying up the moiſture in thoſe places where there was the leaſt circulation of air. Whilſt the fires were burning, ſome men were employed in rubbing hard, with canvas or oakum, every part of the inſide of the ſhip that was damp and acceſſible. Even the ſink or well, which, from the mephitic vapours contained in it, has often proved fatal to ſailors, was not only rendered ſafe but ſweet, by means of an iron pot filled with fire, and let down to burn in it.

The credit of Dr Hales's ventilator not being as yet thoroughly eſtabliſhed in the navy, it was not had recourſe to by Captain Cook; the *wind-ſails*, however, were uſed; and on ſome occaſions, were moſt ſerviceable, particularly between the tropics. They have this diſadvantage, however, that, in hard gales of wind, they cannot be put up, and in dead calms, when they are moſt wanted, they have no ſort of influence.

Captain Cook, we are informed, was ſo lucky as to be plentifully ſupplied with a very material article,

article, viz. freſh water, during the whole voyage. He was not without an apparatus for diſtilling ſea-water; and, though he could not obtain nearly ſo much as was expected from the invention, yet he ſometimes availed himſelf of it. Within the ſouthern tropic, in the pacific ocean, he found ſo many iſlands well ſtored with ſprings, that he was never without a ſufficiency of freſh water for every purpoſe; and ſo anxious was he to have his water quite ſweet, that, whenever an opportunity offered, he emptied what he had taken in but a few days before, and filled his caſks anew. In paſſing from the Cape of Good Hope to New-Zeeland, in the frozen zone of the ſouth, four months were taken up; and, although land was not ſeen for all that time, yet there was always the greateſt plenty of freſh water to be got. Theſe very ſhoals and floating mountains of ice among which the ſhip ſteered, were the means of giving a plentiful ſupply of what was moſt wanted. It had been ſaid that thoſe ſtupenduous maſſes of ice, called mountains, melted into freſh water; though Crantz, the relator of that paradox, doth not imagine they originate from the ſea; but that they are firſt formed in

SECT. II.

Medical Obſervations.

I.

The Hiſtory of a Caſe of Hieranoſos ſucceſsfully treated by the Flowers of Zinc. By Dr William White, *Phyſician at* York.

MRS S. a lady of about 42 years of age, luſty, and, to appearance, of a very healthy habit, ſent to deſire my aſſiſtance, and gave me the following account of herſelf. She always had a very weak ſyſtem of nerves; any ſudden ſurpriſe will render her ſpeechleſs for an hour or two, as I myſelf have ſeen. An emetic, which ſhe is very often neceſſitated to take on account of violent nauſeas and vertigo, which only give way after quitting a great quantity of phlegm

phlegm from her ſtomach, always had that effect. As ſhe could not live without frequent emetics, and, at the ſame time, dreaded their conſtant effect, ſhe deſired me to try ſome medicine of another kind; at length I found that the acetum ſcilliticum had a happy effect. She often takes it, and it is never followed by any degree of aphonia. Such is the peculiarity of this lady's conſtitution, that the gum guaiacum, in whatever form, always is followed by loſs of ſight for ſome hours, by which effect ſhe unerringly knows when it has been given her, however diſguiſed.

She had good health till the eleventh year of her age, and was then taken with the chorea ſancti viti, which held her a long time. About ſixteen ſhe was ſeized with the hieranoſos, which, notwithſtanding the advice of three phyſicians at home, and many elſewhere, continued inceſſantly for three years. She was then reduced to an extreme degree of weakneſs, and paſt any hopes of recovery, her diſorder being ſo ſingular, as to terrify her friends, who deſired her death, as the only releaſe from her ſufferings.

All the claſs of nervous medicines were repeatedly tried, muſk, opium, caſtor, camphor, valerian, the cortex, chalybeates, cold and

and hot bathing, &c. A ptyaliſm was raiſed with calomel, without any effect. Iſſues were cut in both legs and arms; bliſters alone gave her relief, and that only for a ſhort time, during the ſerous diſcharge. After three years the diſeaſe gradually abated, by taking ſome pills of Ward's. I have ſeen her ſeveral times affected with it in a ſlight degree for a few hours, after any thing which hurries her ſpirits. This ſhe patiently ſuffered, as every thing had been done which medicine could afford her.

In November ſhe began to be much worſe than uſual; and, from what ſhe could recollect of her former ſufferings, thought ſhe was going quickly to be as bad as in her firſt attack; ſending for me, I obſerved as follows.

Complains of a violent pain in the right ſide of her face, and univerſal erratic pains and ſoreneſs. A ſcorching heat all over the ſkin, except her feet up to the ancles, which are as cold as marble. Pulſe not quickened, but full; mouth dry, but no great thirſt; body coſtive, which is indeed her natural habit, ſo as to oblige her to the frequent uſe of magneſia. Regular as to the menſes, the return of which ſhe expects in five or

ſix

ſix days. Appetite good, rather voracious; but her ſpirits are always low after a full meal, eſpecially dinner. Has a violent pain in the loins, which often ſhifts into firſt one hip, then the other; the leg of which ſide is then affected with ſtupor and numbneſs, ſo that ſhe drags it after in walking. Faulters in her ſpeech at times, but this continues not long.

All the muſcles in her body in ſtrong convulſive motions, not all at the ſame time, but ſucceſſively; e. g. her face is violently affected, noſe, eyelids, &c. and her whole head, which is thrown violently backward, and often twitched from one ſide to the other, with violent pain. From hence it removes into the arms, firſt one, then the other; theſe being deſerted, one, or both legs immediately become convulſed with violent and inceſſant motions. Thus, all the external parts of her body are, by turns, affected.

She is all the time perfectly ſenſible, and knows what limb is going to be next affected, by a ſenſation of ſomething running into it from the part already convulſed, which ſhe cannot deſcribe in words; but ſhe has frequently told me the part going to be affected, which I always found to be true,

true, though the tranſition is ſurpriſingly quick. A ſlight preſſure upon the part gives eaſe, perhaps by giving tenſion to the muſcles; but, attempting once to hold her head tight, ſhe told me ſhe could not bear it, as it increaſed her pains, which might ariſe from forcibly preventing the free contractions of the convulſed muſcles. She is eaſieſt in a prone poſture. Such has been her ſituation upwards of 48 hours, with ſcarce a moment's remiſſion, by which ſhe complains of great and univerſal foreneſs. No words can convey an adequate idea of her odd appearance; and I do not in the leaſt wonder that, in the times of ignorance and ſuperſtition, ſuch diſeaſes were aſcribed to ſupernatural cauſes and the agency of demons.

As ſhe had formerly, in a ſimilar ſituation, taken ſo many powerful medicines without ſucceſs, I own, had not the zinc occurred to me, I ſhould have deſpaired of trying them again; but, as ſhe was deſirous of taking any thing preſcribed, I ordered a bliſter ad nucham, et florum zinci, gr. i. in a pill, twice a day, waſhed down with a cordial julep. This was on the 28th of November.

29. Bliſter has diſcharged greatly; pulſe leſs full; no convulſions this morning; complains of

of a numbneſs in the right cheek, where her pain was; pain in her loins eaſier; no numbneſs in either leg; ſpirits good this morning. She doubled the doſe of her pills this day.

30. Had ſome ſlight twitchings in the night, but of ſhort continuance; none this morning; feels not the leaſt ſenſible effect from the pills; ſcarce any ſleep the two laſt nights; feet quite warm; pulſe natural; an itching, but no ſcorching heat in the ſkin; has taken ſome magneſia, ſum. pil. ii. ter die.

December 1. Has had a good night; no convulſions ſince I ſaw her yeſterday; no perceptible effects from her pills; in other reſpects, as before. Took nine pills this day.

2. No complaint ſince yeſterday; bliſter almoſt healed. Sum. pil. iv. ter die.

5. On a journey, did not ſee my patient.

4. No return of the ſpaſms ſince I ſaw her laſt; complains of ſickneſs and headach, to which ſhe is very ſubject, for which I ordered her to take an emetic of acet. ſcillit. in the evening.

6. Diſcharged much phlegm, by the puke, as uſual; nerves quite firm to-day, and is in all reſpects in good health. Medicines diſcontinued.

Singular

II.

Singular Effects from a ſlight wound in the Thigh. *By Dr* William Scott *Phyſician at* Hawick, Roxburgh-ſhire.

A man about thirty years of age, a maſon by trade, cleaving a piece of wood with a blunt hatchet, it ſlipt off, and made a wound about two inches above the knee, an inch and half in length, not much deeper than the ſkin. He was then ten or twelve miles from home, but was carried to his own houſe next day, when I was called to viſit him. The wound had bled but little, and was attended with no great pain; I dreſſed it with dry dreſſing, and a poultice of bread and milk was put over it. Every thing ſeemed to go on very well, and in five days he went again to work; but, in the afternoon, a deal in the ſcaffold gave way, and that leg, which had before been wounded, was ſprained. This brought on a great pain and inflammation on the knee, which increaſed daily; but, upon the application of poultices and fomentations, the pain abated.

ted. It ſtill, however, at times, returned, and began to diſcharge a great quantity of thin matter, like whey, ſo as to go through many cloths, as likewiſe the bed-cloaths, ſometimes down to the floor. When I probed the wound, there was a ſinus, about three inches above the wound, almoſt all round, except a ſmall ſpace in the under part, but no deeper than juſt below the ſkin, which contained the matter. When the diſcharge at any time ſtopped, the moſt excruciating pains run all round the knee, till it emptied itſelf to the degree already deſcribed. The pain generally returned in the afternoon, with great violence, and continued till it was relieved by a free diſcharge in the morning. In that condition he continued for fifteen days, when another phyſician was called, who adviſed that a large inciſion ſhould be made. However, that night I viſited him, and ordered three calomel boluſes, for three nights ſucceſſively, and a doſe of ſalts and ſenna the fourth day. Theſe had ſurpriſing effects; for, upon taking the firſt bolus, the pain abated, and the ſwelling of the knee and leg, which was great before, every day diminiſhed; upon taking the purgative, the diſcharge from the wound dried up. I repeated the bolus and phyſic every

week, for three weeks together. In a fortnight after he went to work, and now is in perfect health. Every bolus opened him, and brought off foetid ſtuff; and, upon taking the phyſic, the ſmell was ſo ſtrongly foetid, that every ſtool was obliged to be carried out, otherwiſe no one could ſtay in the room. Every time the boluſes and phyſic were taken, more or leſs of that ſtuff was diſcharged.

III.

Fatty Subſtances voided by Stool. By Dr William Scott, *Phyſician*, Hawick.

A Servant girl, about four or five and twenty years of age, after working hard, in warm weather, cutting down corn, was ſeized with a pain in her ſtomach, loathing of food, obſtruction of the menſes, colics, and pains from flatulency. As the colics frequently ſeized her, injections, anodynes, and ſacred elixir were adminiſtred. After that I gave vomits, and rhubarb boluſes, with calomel. Upon taking two or three of theſe, ſhe

ſhe began to void, by ſtool, ſatty ſubſtances, in great numbers, about the ſize of nuts, beans, peaſe, &c. When theſe were thrown into the fire they burnt like tallow, which they, in every reſpect, reſembled. After paſſing theſe in ſmall quantities for three weeks, ſhe got clear of all her complaints, and has now continued in very good health for theſe ſeveral years.

IV.

Obſervations on Venereal Warts. By Mr William Deaſe, *Surgeon*, Dublin.

AMONG the many obſtinate complaints that accompany venereal infections, I do not know any more hard, ſometimes, to remove, than venereal warts, ſo as not to appear again; nor do I know any caſe in which the perſiſting too long in a courſe of mercurials is attended with worſe conſequences; of which the following caſes are ſtrong examples.

I. A young gentleman, ſometime in 1772, contracted a clap, for which, I believe, he under-

went no regular treatment. Three months after, he came to me for advice about an abſceſs on the verge of the anus. He told me, that, before it appeared, he had a ſwelling in the groin, which went back. As the abſceſs was full of matter, I opened it, and finding the rectum thin and bare, I ſimply divided it. Every thing went on well; after the ſuppuration was compleatly formed, as there was a ſtrong preſumption he was poxed, I adviſed him to rub in a dram of mercurial ointment every ſecond night; but with this he would not comply; ſo I put him on a courſe of the mercurial pill, with a decoction of ſarſaparilla. In three weeks he ſeemed quite well; but then he ſhewed me, for the firſt time, three or four warts he had behind the glans penis. I rubbed them down with lunar cauſtic, and enjoined him to uſe, at leaſt for three weeks more, the pills and decoction. The warts diſappeared, as he followed my advice; and, after that, he went into the country, where he ſoon recovered his former robuſt habit of body.

Four months after, he came to me, and ſhewed me the warts grown again; but ſaid he never enjoyed better health, and would take no medicine, but begged I would give him ſome cauſtic, which

I did; and thereby he occaſionally took them down, and continued in perfect health for a year, from the time I firſt had the care of him. But then another abſceſs, on the other ſide of the anus, ſimilar to the firſt, appeared, which I opened in the ſame manner I had done before.

Another gentleman of the profeſſion was now called in, and, in conſultation, was of opinion the patient was ſtill poxed, and that it was abſolutely neceſſary he ſhould be ſalivated. I urged, that, though there was a probability it might be ſo, yet, as I had often ſeen warts remain after repeated ſalivations, when it might be preſumed the virus was ſubdued, and the complaint but local; and, as our patient had, at preſent, a dry huſky cough and hoarſeneſs, it would be better to treat him in a more gentle manner, and wait the effect. This advice was not received, and his friends put him under the care of the other gentleman, who removed him to a nurſekeeper's, where he had him nine weeks in a ſalivation. His ſore ſoon healed, but the warts remained unaltered; his ſtrength was much exhauſted, and, the laſt week, he began to ſpit blood. It was now found, altho' too late, that mercurials would not do; and, as the laſt reſource, he was ſent to

Wicklow, it being the beginning of May, to drink goats whey; but ſpitting of pus ſoon ſucceeded to that of blood, attended with a conſtant pain in the breaſt, colliquative ſweats, purgings at times, &c. Three weeks before he died, I ſaw him, and he ſhewed me the warts ſtill unchanged. He died, to the laſt degree conſumptive, in Auguſt.

II. In 1772, A young man, about twenty-one or twenty-two, in company with ſome other young men, being all drunk, lay with a common proſtitute. They were all diſeaſed in conſequence. He had a troubleſome heat in making urine, but no running, and ſoon after a number of warts appeared on the glans, and behind it. He went from one practitioner to another, in the country, and took a variety of mercurials, without any alteration, but when he took them down by cauſtic; which produced but a temporary effect, as they ſoon ſprung up afreſh. He at laſt came up to Dublin to have my advice: He had now been for a year diſeaſed, and never had any other venereal appearance; his conſtitution ſeemed only affected by the great quantity of medicine he had taken.

As

As there ſeemed to be no doubt of his being poxed, the different treatments he underwent, having been by no means regular, I adviſed him to ſtay under my care for ſome time, to which he conſented. I began with bleeding and gentle purging; and put him on a ſoft mild diet, &c. and made him take the warm bath. After twelve days preparation, during which time he bathed twelve times, I began with the mercurial frictions, uſing only a dram of ointment each time; and he continued them ſo as not to let the mercury affect his mouth; he left the warts without any application, and waited the event. In ſix weeks, not finding them likely to go off, I rubbed them with the lunar cauſtic; but in a little time they grew up as big as ever. I then had recourſe to the lapis infernalis, and made the whole interior part of the prepuce, and exterior of the glans ſlough off; but ſtill they grew up again; and, after he had been under my care for ten weeks, during which time he rubbed in five ounces of ointment, the two laſt of which made him ſpit, to ſee the effect, I was obliged to ſend him into the country, in danger of a hectic, the warts being as large as ever.

With goats whey, and a milk diet, he recovered in a ſhort time; but the uneaſineſs of mind he ſuffered, made him apply to practitioners in the country, when he took, as he told me, a vaſt quantity of pills, &c. He came up to Dublin once more, after being ten months in the country; it was in June, and he was much in the ſame ſituation as when I firſt ſaw him, affected with no other complaint but the warts. In conſultation with two gentlemen of the profeſſion, it was agreed he ſhould paſs, after the neceſſary preparations, through a courſe of frictions, which was continued for eight weeks without having much effect on his mouth. What moſt encouraged us was, that the firſt four weeks, the warts ſeemed to wither and drop off, but, in the latter end, grew up a freſh. We tried every kind of eſcarotic, ſtrong and weak, thoſe mentioned in the Medical Obſervations, mercurial purges, &c. to no purpoſe. At length we left them off, and put him on the extract of cicuta, and a light decoction of bark.

He now began, after four months from the time he came up to town, to grow weak, ſweat at night, and ſpit ſome blood. He was very much emaciated, and loſt his appetite, his legs ſwelled, and his pulſe was extremely quick. Recourſe

courſe was had in vain to aſſes milk, Seltzer water, Peruvian bark, &c. He went, in October 1774, to the country, and died in December following, conſumptive, the warts remaining as large as ever. The lungs in both theſe patients ſeemed to be the parts chiefly affected.

III. A coachman, after ſome claps, not regularly treated, had warts behind the glans, and at the opening of the meatus urinarius. He applied to me at St Nicholas's Hoſpital, in 1770, where he was twice ſalivated that year, and took a variety of medicines; he had them often conſumed by cauſtic; but ſtill they are at preſent, 1776, as big as they were when I ſaw them firſt. He rubs them down, from time to time, with lunar cauſtic, is robuſt and ſtrong, enjoys excellent health, has been married theſe four years, and has had three healthy children. The mother had never the leaſt complaint, and he has taken no kind of medicine ſince the firſt year.

SECT.

SECT. III.

Medical News.

MR CRUIKSHANK of London, in a letter to Dr Duncan, communicates the following obſervations.

'I deſcribed at lectures, a few days ago, a diſeaſe which is not unfrequent here; and, at the ſame time, gave the method of cure, as propoſed by Mr Hunter. On converſing afterwards, with ſome of the gentlemen from Edinbugh, who do us the honour of attending in Wind-mill ſtreet, I underſtood it was new to them. I imagine, therefore, that an account of it, through the medium of your Commentary, may not be unacceptable to the public.

It ſometimes happens, that pieces of cartilage, or bone covered by cartilage, are found looſe in the

the cavity of the joint of the knee. Theſe are of different ſizes. Some of them I have ſeen, were as large as common garden beans. They are generally flat, oblong, having their edges rounded. It is ſeldom we find more than one of theſe looſe cartilages in a joint; I have ſometimes, however, ſeen two. I formerly conſidered them as belonging to the patella; and that, like the oſſa triquetra in the ſcull, they owed their origin to diſtinct points of oſſification. My having ſince found one entirely cartilaginous, and another, which, though bone covered by cartilage, was formed on the lower end of the femur, has convinced me I was wrong. In the laſt mentioned caſe, there was a cavity in the lower end of the femur, correſponding to the looſe bone, ſhowing that they had been connected with one another; though, as both ſurfaces were nearly ſmooth, the manner of their connection was not evident. I ſhould ſuppoſe that, during their growing, theſe cartilages and bones are connected to the neighbouring parts by veſſels; and that, when either their determined growth is finiſhed, or their ſize is too large for the eaſy motion of the joint, they become looſe. When they become looſe, the ſynovia, from the irritation they induce,

is

is ſecreted in greater quantity; the capſular ligament becomes diſtended; the knee appears ſwelled; a degree of ſtiffneſs takes place in the motion of the joint, with more or leſs of externa inflammation. There is alſo the diſtinct feel of a fluid underneath; and the looſe bit of cartilage gets frequently above the condyles of the femur, on the out or inſide of the knee, and may be laid hold of with the thumb and finger through the integuments. I have a recent caſe juſt now in my eye, and have daily an opportunity of feeling one of theſe cartilages in the living ſubject. When the patient has walked much, the ſynovia is ſenſibly increaſed, and on remaining more quiet, for two or three days, is as ſenſibly diminiſhed. The bits of cartilage (for the patient tells me he ſometimes feels a ſmaller one than that which I have felt) mean while, lie either in the centre of the joint, and conſequently out of the reach of being felt, or on the outſide or inſide of the condyles of the femur, where they may be eaſily laid hold of, and worked between the fingers from the lower to the upper part of the joint. The patient has obſerved theſe cartilages for ſome months paſt, during which time, they have never produced any very great inconveni-

ence,

ence, or confined him to the houſe. The ſymptoms, however, are not always ſo mild, and an operation becomes frequently neceſſary. Much ſeems to depend on the ſurgeon, whether this operation ſhall be a dangerous one or not.

Mr Hunter recommends the removing them by inciſion; but thinks the particular ſpot where the operation is to be performed, as well as the manner of operating, deſerve the greateſt attention. There is a part within the cavity of the joint of the knee, which receives the baſis of the patella, during the extenſion of the leg. It partakes more of the nature of cellular membrane, than capſular ligament, and lies under the lower extremities of the vaſti and crureus muſcles, before they are inſerted into the patella. Mr Hunter propoſes to lay hold of the cartilage or bone, and cut down upon them, at this place; the inciſion, he thinks, ſhould be no larger than juſt to allow of their being eaſily thruſt out. A ſtitch or two is then to be paſſed through the divided integuments, and the lips of the wound, by theſe means, are to be brought together. Theſe ſtitches, however, muſt not paſs into the cavity of the joint; inſtead of uniting the parts in this caſe, they would act as ſetons, and produce inflammation,

mation, in place of preventing it. To be convinced of this laſt aſſertion, he ſays, one needs only to be put in mind of the introduction of a ſeton into the tunica vaginalis teſtis, for the radical cure of the hydrocele. The aim of the ſurgeon, then, is, if poſſible, to heal the wound by the firſt intention. A piece of ſticking plaſter, with proper bandage, and poſition of the joint, may even make ſtitches in the integuments unneceſſary. Mr Hunter recollects ſix or ſeven caſes, in which theſe cartilages were removed by exciſion, though not juſt in the manner recommended. All of theſe, excepting one, did well. The operation in this one was attended with great inflammation, and followed by an anchyloſis of the joint. I have been told of two caſes, which came under the care of a ſurgeon in the country, within theſe few months, and which terminated ill. Whether this want of ſucceſs was owing to ſome overſight in the operator, or to the operation itſelf, I have not been able to learn. There are conſtitutions where any wound, much more a penetrating wound into the cavity of the joint of the knee, will be attended with danger.

The circumſtances which the operator has moſt to avoid, Mr Hunter aſſerts, is the expoſing the cavity

cavity of the joint to much; the lacerating or bruiſing of the capſular ligament; the not properly cloſing the orifice in the integuments; or the employing a blunt or dirty inſtrument in the dividing them. All, or any of theſe circumſtances, he thinks, will produce inflammation of the joint, and render the operation exceedingly dangerous. But, in tolerably ſound conſtitutions, the operation now recommended, performed with the neceſſary precautions, he is convinced, is as ſafe a one as moſt operations in ſurgery.

When the cavity of the joint has inflamed, the danger, he owns, is very great. Ligament and cartilage, the ſubſtances compoſing joints, have fewer veſſels than any other parts, perhaps, of an animal body; they inflame, ſuppurate, or go through the uſual proceſſes of parts under irritation, with greater difficulty; and, when they have gone through them, the conſequences are generally deſtructive of the ordinary intentions of theſe proceſſes; the joint anchyloſes, and is deſtroyed inſtead of being recovered. The irritation, meanwhile, attending ſuch fruitleſs proceſſes, generally proves fatal.

The

* * * *

The following gentlemen have been lately named foreign members of the Royal Society of medicine eſtabliſhed in the courſe of the laſt year by an order of council at Paris.

Sir John Pringle Bart. Med. Reg.
Sir Clifton Wintringham Bart. Med. Reg.
Sir George Baker Bart. Med. Reg.
William Cullen, Med. Reg.
John Fothergill, M. D.
Thomas Glaſs, M. D.
Henry Quin, M. D.
George Cleghorn, M. D.
James Lind, M. D.
David Macbride, M. D.
Thomas Percival, M. D.
Samuel Foart Simmons, M. D.

* * * *

Tranſlation of part of a letter from Dr de Limbourg, F. R. S. phyſician at the Spaw, to Dr Simmons.

"The Vienna prieſt you mention, ſeems to be the ſame who has made ſo much noiſe in other parts of Germany, particularly at Elwangen.

gen. His name is Geſner. I had a long correſpondence concerning him with a man of learning and diſtinguiſhed reputation, who is firſt phyſician to an Elector, and very far from being credulous on any other occaſion, yet ſo firmly perſuaded of the reality of the curate Geſner's miracles, that he was at length ſomewhat piqued at my want of faith. The celebrated De Haen ſided with Geſner, and publiſhed, a work, *De Miraculis*, which was ſuppreſſed, and much has been ſaid of him in different journals; but this archiater gave me an account of ſome wonderful facts, which have appeared in none of thoſe publications, and of which he himſelf was witneſs, with ſeveral others, (phyſicians and divines) of different religions, who were aſſembled for this purpoſe by order of the Elector of Bavaria. Geſner, placing his right hand on the forehead, and the left on the occiput, in the name of Jeſus commanded epileptical patients to be attacked with their fits, and hyſterical patients to have ſudden convulſions, with, or without delirium, cries, laughter, &c. or he would command fainting, or St

Vitus's dance; and in all theſe things he was inſtantly obeyed, and the moment he ſaid, 'Get 'up,' they were cured. I ventured to ſuppoſe, that theſe tricks were ſimilar to thoſe which made ſo much noiſe at the deacon's tomb at Paris formerly, and I pleaded the effects of fear, credulity, &c. on the imagination of thoſe people; but my arguments were not ſufficient to convince the learned Archiater, who atteſted to me the cure of more than three thouſand patients in this way. But the affair ended by the curate's being forbidden to perform any more of his miracles in Germany; and for ſome time paſt I have heard nothing of him."

* * *

Extract of a letter from Dr Simmons to Dr Duncan.

"In my way to the German Spa laſt year, I viſited the prior of the Engliſh Dominican convent at Louvain, who is famous for his ſkill in the management of bees. This ingenious friar, who is every day making ſome curious experiments on this ſubject, has diſcovered, that the pure honey we have been uſed to procure from Narbonne, Spain, and Minorca, is to be met with in every

every country. It is frequently collected by the bees after gentle ſhowers, and when the hops (of which there are conſiderable plantations in the Auſtrian Netherlands) are covered with honey-dew, he never fails to find it in the hive, and then he cuts out the part of the comb in which it is depoſited. The bad effects of the honey-dew are well known to my countrymen the hop-planters in Kent. The good Dominican goes ſo far as to ſuppoſe, that theſe bad effects would be prevented, in ſome degree, were the farmers and labouring people to be more ſollicitous about the preſervation and increaſe of bees. They are ſo much attended to in the Low Countries, that a certain farmer near Louvain ſells a thouſand ſtocks every year, at nine eſcalins each (about five ſhillings Engliſh). The prior, who has a great number of hives in his garden, aſſerts, that he gets three times as much honey as is uſually procured by the common management, as he is able to make his bees work when he pleaſes, and at any time of the year. When a colony is become too populous, he diſtributes the bees into different hives, and now and then he finds it neceſſary to collect the bees of ſeveral hives into one. He

had been unſucceſsful, however, the day before I viſited him, in one of his experiments; for, having deprived a hive of its queen, the whole colony had migrated to another hive, and a battle had enſued, in which all the emigrants were killed. I was not without my fears, when I approached ſo great a number of hives; but the prior aſſured me I ſhould be in ſafety, if I would carefully keep my mouth ſhut, and breathe very gently through my noſtrils only. In this, he ſaid, conſiſted the whole ſecret of approaching them, and in this way he turns up his hives with great unconcern, and even cuts out parts of the comb while the bees are at work. This is a curious fact, nor is it wonderful, that the breathe ſhould be diſagreeable to the delicate organs of theſe inſects."

* * * *

The governor and aſſembly of the iſland of Jamaica have lately voted the eſtabliſhment of two botanical gardens there, on a plan which muſt tend equally to the credit of their country and the good of mankind. The intention is to uſe theſe gardens as the means of introducing into the Weſt Indies every uſeful vegetable production,

tion, which, in the great variety of climate which the iſland of Jamaica, in particular, affords, may have a chance of being cultivated with advantage, either for food, medicine, trade, or pleaſure.

They have purchaſed, for this purpoſe, a houſe with ſeventy acres of ground adjoining to it, about eight miles from Kingſton. This ground, the greateſt part of which is already in a ſtate of cultivation, has two diſtinct climates. The tropical climate at the foot of the hill, and that of Madeira where the houſe is ſituated. They have likewiſe allotted fifty acres more for another garden, in a ſituation ſtill colder, being about three thouſand ſix hundred feet above the level of the ſea, for the reception of the plants of cold countries.

They have voted a very liberal ſalary for a botaniſt of philoſophical knowledge and extended views, ſkilled in chemiſtry and all the branches of natural hiſtory, to act as ſuperintendant of theſe gardens. Sir Baſil Keith, the preſent governor, whoſe activity in promoting this ſcheme does him much honour, wrote ſome time ago to Dr Hope, Profeſſor of botany at Edinburgh, with whom, and Sir Alexander Dick, Baronet, late Preſident of the College of Phyſicians at Edin-

burgh, he had formed the outlines of this plan, requeſting that he would endeavour to find out a gentleman with abilities adequate to the objects intended by ſuch an eſtabliſhment. Dr Hope recommended Dr Thomas Clarke, a young gentleman equally diſtinguiſhed for genius, activity, and induſtry, and who has had an opportunity of improving uncommon natural abilities, by an education conducted on a plan no leſs liberal than judicious. The aſſiſtance which he lent to this periodical publication, while he remained at Edinburgh, demands our grateful thanks; and we ſtill hope, notwithſtanding the diſtance from us at which he will now be ſituated, that we ſhall not be deprived of his future aid.

Dr Clarke, after viſiting the moſt remarkable botaniſts and botanical gardens in Europe, and receiving from theſe whatever he judged requiſite for the object of his expedition, ſet ſail from England for Jamaica ſome months ago, carrying along with him a collection of valuable vegetables, which may afterwards add to the riches and plenty of the Weſt India iſlands.

There is the greateſt reaſon to hope that Dr Clarke's exertions, ſupported by the liberal ſpirit of

of the governor and aſſembly, will be productive of thoſe important ends the projectors of this ſcheme have had in view. Should theſe ends be in any degree accompliſhed, we do but juſtice to the merit of Matthew Wallen, Eſq; member of the aſſembly, in publicly mentioning him, as one of the firſt and greateſt promoters of this undertaking.

* * *

Dr Duncan, who, during the laſt winter-ſeſſion, read lectures at Edinburgh on the theory and practice of medicine to a very numerous claſs, has alſo carried into execution the ſcheme which he propoſed of giving lectures on the caſes of patients ſubjected to chronical diſeaſes. Theſe lectures were attended by above an hundred ſtudents, and, at the requeſt of ſeveral of theſe gentlemen, who mean to ſpend the ſummer-months in Edinburgh, Dr Duncan propoſes to begin another courſe of lectures of the ſame nature, about the middle of May.

While theſe lectures are more immediately intended for the inſtruction of ſtudents, they are alſo the means of furniſhing the indigent with advice and medicines gratis, when ſubjected to chronical

diſeaſes. The number in ſuch a ſituation, who have applied for aid, has induced Dr Duncan to propoſe to the conſideration of the charitable and humane, a ſcheme for eſtabliſhing at Edinburgh a public Diſpenſary for the relief of the poor, when ſubjected to diſeaſes of ſuch a nature, as either to render them improper objects for admiſſion into an hoſpital, or not to require it.

Although ſuch an inſtitution might ſeem to be particularly proper at Edinburgh, as the managers of the Royal Infirmary, which is the only charity at that place for the relief of the poor in time of ſickneſs, have, for many years paſt, aboliſhed any regular eſtabliſhment for out patients, and have gone to the utmoſt extent of their funds in relieving the neceſſities of thoſe whoſe diſeaſes require admiſſion into an hoſpital; yet this ſcheme is likely to meet with much oppoſition. But, as it has received the patronage of ſome gentlemen, whoſe influence is extenſive, whoſe ſentiments are liberal, and whoſe conduct is ſteady, the probability is, that it will at leaſt have a fair trial. The inhabitants in general will then be able to judge of the advantages and diſadvantages of ſuch ſcheme, not on fallacious reaſoning, but on the ſure ground of experience.

This

This charity is propoſed to be conducted upon ſuch a plan, that the medicine-money obtained from ſtudents will be almoſt, if not altogether, ſufficient for defraying the annual expence of it. Aid from the generous is only neceſſary for defraying that expence which muſt attend the firſt eſtabliſhment of ſuch a ſcheme. As a ſubſcription for that purpoſe is already begun, it is probable, that a regular eſtabliſhment of the kind now mentioned, will take place at Edinburgh by the beginning of next winter; and it may afford an opportunity for giving caſe-lectures, which, if they be judiciouſly conducted, cannot fail of being highly inſtructive to ſtudents of medicine.

SECT.

SECT. IV.

List of New Books.

A Discourse upon ſome late improvements of the means for preſerving the health of mariners, delivered at the anniverſary meeting of the Royal Society, November 30. 1776. By Sir John Pringle Bart, Preſident. London.

A ſhort account of the preſent empidemic cough and fever, in a Letter to Dr de la Cour at Bath. By william Grant, M. D. 8vo, London.

An Eſſay on the peſtilential fever of Sydenham, commonly called the jail, hoſpital, ſhip, and camp fever. By William Grant, M. D. author of the Obſervations on Fevers. 8vo, London.

Philoſophical Tranſactions of the Royal Society of London, vol. LXVI. part II. 4to, London.

A Philoſophical Eſſay concerning light, by Bryen Higgins, M. D. 8vo, London.

De Arithritide primigena et regulari Gulielmi Muſgrave, M. D. apud Exonienſes olim practici, opus poſthumum, quod nunc primum publici juris facit Samuel Muſgrave, M. D. authoris pronepos. 8vo, London.

Diſſertatio Medica inauguralis de Rubeola, auctore Sam. Foart Simmons, Anglus, 4to, Lugd. Bat.

A New Medical Dictionary, or general repoſitory of phyſic, containing an explanation of the terms, and a deſcription of the various particulars relating to anatomy, phyſiology, &c. By G. Motherby, M. D. Folio. London.

Recueil d' obſervations ſur les differentes methodes propoſées pour guerir la maladie epidemique qui attaque les betes à corne, ſur les moyens de la reconnoitre par tout ou elle ſe pourra manifeſter, et ſur la maniere de deſinfecter les etables, par Mr Felix Vicq d' Azyr medicin, envoye, par les ordres du Roi, dans les provinces ou regne la contagion. 4to, Paris.

Inſtructions ſur la maniere de deſinfecter les villages; par le meme. 4to, Paris.

Obſer-

Obſervations ſur les fievres putrides et malignes, avec des reflexions ſur la nature et la cauſe immédiate de la fiévre ; par M. Fournier medicin de la faculté de Montpellier, de la ſocietè royale des ſciences, medicin penſionnée de la ville de Dijon, medicin des etates generaux du Duché de Burgogne, et inſpecteur des eaux minerales et medicinales, tant de France qu' etrangeres. 8vo, A. Dijon.

Chymie hydraulique pour extraire les ſels eſſentiels des vegetaux, des animaux, et des mineaux, par le moyen de l'eau pure ; par Mr le Comte de la Garaye ; nouvelle edition, revue, corrigée, et augmentée des notes, par M. Parmentier. 12mo, a Paris.

Traité de la diſſolution des metaux ; par M. Monet, des academies royales des ſciences de Stockholm, de Turin, de Rouen, et de la ſocieté literaire d'Auvergne. 12mo, Amſterdam.

De novorum oſſium, in integris aut maximis, ob morbos, deperditionibus, regeneratione, experimenta ; ubi, maxima materiae affinitate, breviter de fracturis et de vi quam natura impendit in oſſibus elongandis dum creſcunt. Auctore Michaele Troja, medicinae doctore Neapoli, et chirurgo

chirurgo latere in regali S. Jacobi noſocomio. Lutetiae Pariſiorum.

Memoire pour ſervir au traitement d'une fievre epidemique, fait et imprimé par ordre du gouvernement; par M. Marnet, docteur en medicine de l'univerſité de Montpelier, agregé au college des medicins a Dijon, agregé honoraire du college royal de medicine de Nancy, cenſeur royal, ſecretaire perpetuel de l'academie des ſciences, arts, et belles lettres de Dijon, &c. 8vo, a Dijon.

Traité de la petite verole, tirée des commentaires de G. V. Swieten, ſur les aphoriſmes de Boerhaave, avec la methode curative de M. de Haen, premier profeſſeur de medicine pratique a Vienne en Autriche. 12mo, Paris.

Inſtitution des ſourds et des muets, par la voie des ſignes methodiques; ouvrage qui contient le projet d'une langue univerſelle, par l'entermiſe des ſignes naturels aſſujettis a une methode. 12mo, Paris.

Obſervations ſur la perte de ſang des femmes en couches, avec le moyen de les guerir, par M. le Roux, maitre én chirurgie a Dijon, et chirurgien de l'hoſpital general de la meme ville. 8vo, a Paris et a Dijon.

Cours

Cours d'acouchements, diſtribué en trente leçons, avec l'expoſition ſommaire de la matiere qu'on doit expliquer dans chacune d'elles, redigé pour l'inſtruction des eleves, par ordre des etats du pays et Comté de Hainault. 12mo, Mons.

Recherches ſur la rougeole, ſur le paſſage des aliments et des medicaments dans le torrent de la circulation, ſur le choix des remedes mercuriaux pour les maladies veneriennes, par M. J. F. S. Duboſcq de la Roberdiene, docteur en medicine de la faculté de Caën, correſpondent du college royal des medicins de Nancy. 12mo, Paris.

Raymundi Vieuſſens, doctoris medici Monſpelienſis, neurographia univerſalis; hoc, eſt omnium corporis humani nervorum, ſimul et cerebri medullaeque ſpinalis, deſcriptio anatomica, &c. Nova editio. 4to, Toloſae.

Les plantes purgatives d'uſage, tirées du jardin du Roi et de celui des M. M. les apothecaires de Paris, repreſentées avec leur coleur naturelle, et imprimées ſelon le nouvel art, avec leurs vertus et leurs qualités, auxquelles on a joint, a la diſſection de leur fleur et de leur fruit, le Species

plantarum

plantarum Linnaei, &c. par M. Dagoty pere, anatomiſte et botaniſte penſionné du Roi.

Avis au peuple ſur l'amelioration de ſes terres et la ſanté de ſes beſtiaux. 12mo, Paris et Avignon.

Supplement au traité de M. Petit, ſur les maladies chirurgicalles, et les operation qui leur conviennent, redigé par M. Leſne. 8vo, Paris.

Les principes ſur l'art des accouchements en faveur des ſages femmes, par M. Bauldeloque. 12mo, Paris.

CONTENTS.

BOOKS.

Arvidſon, J. A. De acido ſacchari Pag. 255
Blagden, Cha. Experiments in a heated room 265
Nairne, Ed. Experiments on the water obtained from the melted ice of ſea-water 275
Muſgrave, Sam. An eſſay on the nature and cure of the worm fever 283
Collin, Hen. Joſ. De cicuta efficacia 291
Meza, S. T. De uſu noxio et ſalubri veſicantium 300
Pringle, Sir John, On the means of preſerving the health of ſeamen 310

MEDICAL OBSERVATIONS.

The hiſtory of a caſe of hieranoſos ſucceſsfully treated by the flowers of zinc. By Dr William White, *phyſician at Hanover.* 326
Singular effects from a ſlight wound in the thigh. By Dr William Scott, *phyſician at Hawick, Roxburgh-ſhire.* 332
Fatty ſubſtances voided by ſtool. By Dr William Scott, *phyſician, Hawick* 334
Obſervations on venereal warts. By Mr William Deaſe, *ſurgeon, Dublin* 335

MEDICAL NEWS 342

LIST OF NEW BOOKS 358

MEDICAL

AND

PHILOSOPHICAL

COMMENTARIES.

By a SOCIETY in EDINBURGH.

Trahimur omnes laudis ſtudio, et optimus quiſque maxime gloria ducitur. CICERO.

VOLUME FOURTH.

PART IV.

LONDON:

Printed for J. MURRAY, No. 32. Fleet-ſtreet;
W. CREECH, C. ELLIOT, and
M. DRUMMOND, *Edinburgh;*

M,DCC,LXXVII.

MEDICAL COMMENTARIES.

SECT. I.

An Account of Books.

I.

Recueil des OEuvres Phyſiques et Medicinales, publiées en Anglois et en Latin, par M. Richard Mead, *Medecin du Roi de la Grande Bretagne, Membre de la Societé Royale de Londres, et du College Royale des Medecins de la même ville. Traduction Françoiſe, enrichie des decouvertes poſterieures a celles de l'Auteur, augmentées de pluſieurs Diſcours preliminaires, et de notes intereſſantes ſur la Phyſique, l'Hiſtoire naturelle, la theorie et la pratique de la Medecine,* &c. *Par* M. Coſte, *Medecin de l'Hopital Royale et Militaire de Nancy.* 2 tom. 8vo, a Bouillon.

DOCTOR COSTE, who has favoured the public with this elegant and accurate edition of Dr Mead's works, has lately, through

the intereſt of his friend and patron M. de Voltaire, been appointed phyſician to the military hoſpital at Calais. The works of our celebrated countryman are ſo univerſally ſtudied and admired, that, had this tranſlation of them been merely a literal one, we ſhould have contented ourſelves with barely announcing it in our catalogue of new publications; but it is enriched with ſo many learned notes and additions, that it ſeems to have a particular claim to our attention. It is with no little pleaſure we obſerve the honour done to this country, by the pains that have been beſtowed on the continent on the works of Dr Mead. Dr Lorry had before publiſhed, at Paris, a Latin edition of ſuch of them as had before appeared only in Engliſh. 'The Latin writings of 'this celebrated phyſician,' ſays Dr Lorry, in his preface, 'have occaſioned all Europe to envy Eng-'land the poſſeſſion of the works he had printed 'only in his own language.' Other editions have been publiſhed by Mortier and Cavelier. Dr Coſte has carefully conſulted all theſe, and thus has been enabled to render his own a very compleat one. He has not omitted even the diſſertation on the medals of Smyrna, though it is not to be met with in the London quarto edition. In the

the preface to this work, the editor, after having pointed out the plan he has adopted, gives ſome account of the life of this author. To the eſſay on the viper, Dr Coſte has added ſome obſervations to prove the utility of eau de luce, which had been recommended as a remedy againſt the bite of this reptile, by M. de Juſſieu, ſo long ago as 1747. This medicine derives its virtues in theſe caſes from its volatile alkali.

The editor's zeal has led him to vindicate Dr Mead and Baglivi's account of the tarantula, in oppoſition to the Abbé Nollet; but it is now well known, that the wonderful effects aſcribed to that inſect are fabulous.

There are ſeveral inſtances of ſpontaneous hydrophobia mentioned by Dr Mead and other authors. The editor has added one to the number, and it is a very intereſting one. It happened to a young lady, on the 6th day of a putrid fever. The dread of water continued during fourteen days. This melancholy ſcene paſſed in a convent, in which the patient had been confined more than a year, ſo that there could be no ſuſpicion of her having been bit by a mad animal. The patient recovered; and Dr Coſte imputes his ſucceſs in a great meaſure to the uſe of glyſters,

which were thrown up five or ſix times every day.

In his notes to the eſſay on venomous exhalations, the editor has vindicated the waters of Paris, from an aſpertion made againſt them by Dr Liſter, in his journey to Paris, and cited by Dr Mead. He contends, that the inhabitants of the quarter that is ſupplied by the water of Arcueil, are not more ſubject to calculous concretions than thoſe of other parts of the city; and that the greateſt part of the patients who are cut for the ſtone, every year at Paris, come from the provinces, being drawn thither by the celebrity of the ſurgeons, or the convenience of the hoſpitals. In another part of the ſame eſſay, the editor, in a very long and curious note, has undertaken to rectify the miſtakes of medical authors, who, on the teſtimony of Juvenal, '*quis 'tumidum guttur miratur in Alpibus?*' have followed each other in giving great necks to all the inhabitants of the Alps, and aſcribed them to the uſe of ſnow water; but Dr Coſte, who was born in the neighbourhood of the Alps, aſſerts, that the bronchocele is not more common there than it is in many of the provinces of France. He obſerves, that the city of Geneva is the only

ſituation

ſituation near thoſe mountains where the imputation of Juvenal is juſtified. One meets there with many ſwelled necks, and particularly in women; but he is of opinion, that their cauſe is not to be looked for in the uſe of ſnow-water; becauſe it is well known, that the water derived from thoſe mountains, is filtered through beds of earth and gravel before it reaches the lake of Geneva; and he is rather induced to aſcribe this enlargement of the thyroid gland to the Geneveſe manner of living. He obſerves, that they conſume a prodigious quantity of milk; that they eat a great deal of farinaceous food, and that they drink but very little wine, eſpecially the poorer ſort of people, who are more ſubject to this diſeaſe than the rich; and it is a fact, that at Montmerlian, Chambery, and other places, where people live after the French manner, theſe ſwellings are very rare.

The editor, in an introduction to the diſcourſe on the plague, ventures to ſuppoſe, that Dr Mead, in attempting to refute the opinion of ſome French phyſicians, who aſcribe the propagation of the diſeaſe in many inſtances to fear, has gone into a contrary extreme, in denying alogether its effects in this way. He gives the following, a-

mongſt other obſervations, in ſupport of his argument. The fact happened during the laſt plague at Marſeilles. In the general diſorder of the town, a great number of dead bodies had been heaped together in a certain part of the city. The putrid odor which exhaled from them could not fail to ſpread the contagion. The governor of the city, who was a man of great fortitude and humanity, ſaw this, and, like another Decius, determined to devote himſelf to death. He took with him fourſcore grenadiers, who were directed to remove the bodies to a deep pit he had cauſed to be got ready for this purpoſe. The governor not only attended in perſon to ſee this buſineſs executed, but was the firſt to begin it, by drawing, with his own hands, one of the bodies from the heap. Eight of the grenadiers periſhed on the ſpot; at night 79 of them were dead; the 80th man ſurvived only during a few days, while the governor, who had voluntarily entered on this buſineſs, and who had felt no perturbation of mind in the execution of it, remained free from any infection.

Dr Mead thought, with good reaſon, that the ſudor Anglicus was of foreign origin, as it had made great deſtruction in Germany and other countries.

countries. The ingenious editor obſerves, in a note, that this diſeaſe is ſometimes epidemic in Picardy, but that it is not properly ſpeaking an ephemera, as deſcribed in England, as it runs into the 3d, 5th, and even to the 7th day. M. Bellot, who reſided a long time in that province, has written a very good theſis on this ſubject. *An febri putridae Picardii* Suete *dictae, ſudorifera? Affirm. propugn.* Paris, 1733.

In a note to that part of the medical precepts, in which Dr Mead has introduced the famous caſe of Lady Page, Dr Coſte mentions a living inſtance of Dropſy in a ſtill more extraordinary degree. The patient, who is a female of the name of Thibaut, reſides at Nancy, where the editor has often ſeen her. She is now about 38 years of age, and, in the ſpace of three years, has been taped 98 times, and between 16 and 18 Paris pints of water have been drawn off at each operation. Lately the liquor drawn off has been of a purulent nature; and at the laſt operation, before the writing of this note, about a pint of pus came away. The patient's abdomen is conſtantly hard and elevated, but in other reſpects ſhe enjoys tolerable health.

For

For many other intereſting obſervations we beg leave to refer our readers to the work itſelf, the limits of this publication not permitting us to enter more minutely into its merits; we cannot diſmiſs it, however, without remarking, that the learned editor has enriched it with many elegant engravings, particularly of the Smyrna medals; and there can be no doubt, but that, on any future re-publication of Dr Mead's works in Engliſh, the editors will be enabled to derive much uſeful information from the preſent accurate edition by Dr Coſte.

II.

Speculations and Conjectures on the Qualities of the Nerves. *By* Samuel Muſgrave, M. D. F. R. S. &c. 8vo, London.

MEDICINE being almoſt entirely a conjectural art, and the human body, in which its operations are carried on, being in different ſubjects ſo various, that no general concluſions can be formed from the effects of remedies on individuals, no rational theory of diſorders, our author

author is of opinion, can ever be obtained. There is no difficulty, however, he thinks, in diſcovering many relations, which the main component parts of the body have to one another; thus, whatever difference there may be in the elements of the human frame, there is yet no individual in whom the heart and arteries do not propel the blood, and the veins reconvey it, in whom the muſcles are not the immediate, and the nerves the primary cauſe of motion. Theſe relations, he thinks, are probably unalterable, and may therefore become the object of ſcience; and that ſcience alſo may be increaſed by the diſcovery of new relations. It is the intention of this treatiſe, we are informed, to add one more to thoſe already known, by ſhewing, that, when the human body is diſordered, the firſt morbid impreſſion is made upon the nerves, the other parts receiving the miaſma entirely from them; that, when health is reſtored, the firſt ſalutary impreſſion is alſo made upon them; and that they are, of courſe, the grand medium through which health and ſickneſs are produced.

In order to demonſtrate the great influence of the nervous ſyſtem, both in the production and

and cure of diſeaſes, Dr Muſgrave ſets out with ſhewing, to what degree the circulation of the blood depends upon the nerves. Nobody will doubt, but that the circulation is, in a certain ſenſe, quickened or retarded by the nerves; for the heart being muſcular, and its power of courſe depending upon the nerves, it muſt contract with greater or leſs force, in proportion as the power communicated by its proper nerves, is greater or leſs. Our author, however, imagines, that the nerves have likewiſe a conſiderable power, in leſſening or increaſing the velocity of the blood, even after it leaves the heart. The opinion, he thinks, is rendered certain, from the conſideration of ſome phaenomena which evidently depend upon the nerves, becauſe they proceed from intellectual cauſes; that is, from vivid impreſſions which certain ideas make in the mind. The facts alluded to are, the erection of the penis from laſcivious ideas, and the accumulation of blood in the face from anger or ſhame. The locality of ſuch appearances is a convincing argument, he ſays, of their being produced by ſome cauſe entirely diſtinct from the force of the heart; for the blood being thrown to every part of the body at once by the heart, whatever

phaenomena

phaenomena are produced by it, cannot be confined to a ſingle part, but ought of neceſſity, if no other cauſe intervened, to affect the whole body. The phaenomena taken notice of proceed, according to our author, entirely from a conſtriction of the veins; becauſe the ſucceſſive dilatation and contraction of the arteries, however ſmart, could not, he thinks, occaſion any permanent congeſtion of the blood. He acknowledges, that no genuine muſcular fibres ſurrounding the veins have ever been demonſtrated; it is certain, however, he ſays, that their coats are continually on the ſtretch, and have a perpetual *conatus* to contract upon the fluid that paſſes through them. It is from this latent contraction, he obſerves, that Baron Haller explains ſome phaenomena, obſerved firſt by himſelf, viz. the flowing of the blood, contrary to gravity, and contrary to the laws of the circulation, towards any aperture of a neighbouring vein.

Having endeavoured to prove the exiſtence of a contractile power in the veins, our author next proceeds to ſhew, that it muſt, in a great meaſure, be regulated by the influence of the nerves. Among the different reaſons adduced in ſupport of this opinion, the paleneſs occaſioned

ed by fear, is mentioned as one. Such a paleneſs, he ſays, muſt evidently ariſe from ſome change in the blood-veſſels; and being frequently not a momentary phaenomenon, it can hardly, he thinks, be imputed to the action of the heart and arteries being ſuſpended, which, except in caſes of abſolute fainting, muſt always be momentary. It muſt therefore, he ſays, be referred to a diminution of the ordinary tonic conſtriction of the veins, which occaſioning the blood to be more readily tranſmitted through them, leſs of it than uſual paſſes into the ſmall cutaneous veſſels. The following poſition may therefore, he thinks, be conſidered at leaſt as probable, viz. that there is a certain tonic influence exerted by the nerves upon the venous ſyſtem, by which it is kept in a due ſtate of conſtriction; that an increaſe of this force increaſes the conſtriction, and obſtructs the circulation of the blood; and that, on the contrary, a diminution of it diminiſhes the conſtriction, and ſuffers the blood to flow through them without reſiſtance.

It adds greatly to the probability of this doctrine, we are told, that the epilepſy, which is a powerful ſtimulus to the whole nervous ſyſtem,

is

is attended alſo with ſo violent a conſtriction of the veins, that the blood cannot enter them, ſo that, on diſſecting thoſe who have died in the fits, no blood has been any where found except in the arteries. As this is the ſtrongeſt inſtance that can be given of ſtimulated nerves, ſo a fainting fit is the ſtrongeſt inſtance of their relaxation, in which, as formerly obſerved, the cutaneous veſſels are left empty, the blood paſſing without any reſiſtance through the large internal veins.

Where a particular nerve is ſtimulated, there is generally, if not always, ſays our author, a proportionable conſtriction of the adjoining venulae; the moſt ſimple inſtance of this is the tumor and inflammation occaſioned by a thorn ſticking in any ſenſible part. Did the veins, in theſe caſes, tranſmit the blood as readily and freely as uſual, there could be no ſuch tumor and congeſtion as there commonly is, even when there is no fever, and when, of courſe, the pulſations of the heart are not increaſed in number.

Theſe, and other inſtances which might be adduced, ſerve to prove the influence of the nerves on the venous ſyſtem. And the arteries being all encircled with a muſcular coat, and every thing

thing muſcular being actuated by nerves, it would, our author thinks, be altogether unneceſſary to enter into a formal proof of the arterial ſyſtem being ſubject to conſtriction from the ſame cauſe.

Animal heat is the next ſubject that comes under our author's conſideration. The two prevailing opinions on this point are, one, that it ariſes from an inteſtine fermentation of the animal juices; and the other, that heat is produced by the attrition of theſe juices with the ſolid tubes through which they circulate. After refuting both theſe opinions, ſeveral arguments are advanced to ſhew, that on the nerves animal heat entirely depends. One principal cauſe of increaſed heat in the body, is pain, which, ſays our author, appears, by an infinity of experiments, to be an affection of the nerves only; but the moſt unexceptionable inſtance of heat being increaſed by an affection of the nerves, is, when the cauſe of the affection is wholly intellectual. Thus, grief, joy, ſhame, anger, &c. cannot, it is imagined, act in any other manner in the production of heat, than through the medium of the brain and nerves.

Dr

Dr Muſgrave now proceeds to ſhew, that irritations of the nerves have frequently a conſiderable influence in producing a corrupted ſtate of the animal fluids. That the nerves, he ſays, when irritated, have a power of corrupting the fluids, is deciſively proved by the experiments of Haller, who found, that, by tying the nerve of the eight pair near the carotid, the matters contained in the ſtomach of the animal, which was a rabbit, fell immediately into a ſtate of perfect putrefaction. On this principle, our author accounts for ſuch vomitings of offenſive bilious matters, as frequently occur in fractures of the ſkull, where we know the injury to be confined to the brain. The ſtimulus of gravel in the ureters, or of a ſtrangulated hernia, is likewiſe well known to have much the ſame effect.

It is frequently obſerved, that, in blood-letting, the firſt and ſecond cups are covered with an inflammatory cruſt, which is not found in any of the ſubſequent. This had commonly been attributed to the greater velocity, with which the firſt ſtream iſſues from the vein. But the late Mr Hewſon obſerved this difference, even when there was no difference in the velocity, nor indeed, as far as he could perceive, in any other

circumſtance. He was of opinion, therefore, that the properties of the blood itſelf are changed during the evacuation; and if we admit, ſays our author, what from many other phaenomena ſeems probable, that the ſtate of the fluids depends upon the ſtate of the nerves, it then becomes eaſy to conceive, that the febrile ſtimulus may be ſo much abated by drawing off the firſt or ſecond cup, that a third cup, though drawn at the ſame time, may approach nearer to the ſtate and appearances of healthy blood.

In the fourth chapter of Dr Muſgrave's treatiſe, dropſy is taken into conſideration. It will perhaps, he ſays, be thought extravagant, even to ſuggeſt, that the dropſy ariſes from a diſorder of the nerves, and not rather from a corruption of the fluids, or elſe from a rupture of the lymphatics. Yet, if it be conſidered, that dropſy, in many caſes, is not an original diſorder, but the conſequence of ſome other, ſuch as fevers or obſtructions of the viſcera, by which are meant, hardneſs, attended with more or leſs pain; and if it can be made appear, that the original diſorder was an affection of the nerves, we may ſafely infer, he thinks, that the dropſy is ſo too. Several inſtances are afterwards quoted from

different

different authors, not only of dropſy being produced by diſorders ſeemingly of the nervous kind, but likewiſe of nervous diſeaſes which appeared to originate from dropſy; and this, ſays our author, muſt be conſidered as the ſtrongeſt poſſible proof of dropſy being owing to an affection of the nerves.

In the following chapter, Dr Muſgrave endeavours to prove, that all diſorders are probably diſorders of the nerves. If, ſays he, the poſitions already laid down are probable, that the nerves cauſe great irregularities in the circulation, that they increaſe animal heat, that they alter the nature and properties of animal fluids, and, laſtly, that their unhealthineſs produces dropſy; it ſeems no great ſtride in reaſoning, to infer, that all diſorders of the body are produced through this medium, and are in fact diſorders of the nerves. Many ingenious arguments are advanced in ſupport of the opinion; of theſe, the three following ſeem to be the moſt material: 1*ſt*, That it is now pretty generally allowed, that obſtruction, the cauſe formerly aſſigned for all, except nervous diſorders, is wholly inadequate to the effect. 2*dly*, That the external cauſes to which the greater number of diſorders

are univerſally, and ſeemingly with good reaſon, attributed, are plainly ſuch whoſe primary action is exerted upon the nerves. And, 3*dly*, The diſorders produced by poiſon, appear to be cauſed, not by the operation of the poiſon on the fluids, and the conveyance of it by them to the different parts of the body, but, on the contrary, by the irritation and corruption of the nerves, previouſly to the alterations produced in the fluids. As a proof of which, it may be obſerved, our author thinks, that the operation of poiſons is, in ſome inſtances, too quick, and in others too ſlow, to admit of our attributing the propagation of it to the circulation of the fluids.

Doctor Muſgrave now proceeds to ſhow the probability of medicines curing diſorders acting wholly through the nerves. We cannot, he thinks, on any other ſuppoſition, account for the aſtoniſhing effects frequently produced on the ſyſtem by very ſmall quantities of different medicines, ſuch as antimony, mercury, &c. It is often obſerved, too, that remedies which give great relief when firſt applied, in a ſhort time loſe their virtue, and become wholly inert; now, ſays he, if their efficacy depended upon any change made in the fluids, it ought to be increaſed,

rather

rather than diminiſhed by repeated doſes; juſt as every drop of acid added to an alkali brings it nearer and nearer to a neutral ſtate. But, if we ſuppoſe that medicines act principally on the nerves, nothing can be more natural than that the ſtimulus ſhould be ſtrongeſt when firſt applied, and gradually grow weaker as the nerve by habit grows more callous and inſenſible. Independently, however, of the probability of the ſuppoſition, there are many caſes in which we may poſitively ſay, that the cure of the diſorder ariſes from ſome change in the nerves. This is evident in ſuch diſeaſes as are cured by change of air, muſic, aether externally applied, the effluvia of burnt feathers, matricaria, aſſa foetida, &c. Moſt of theſe, ſays our author, are unqueſtionable inſtances of medicines acting by the nerves, and cannot but create a ſuſpicion, that medicines received into the ſtomach, act principally through them; and this conſideration, he thinks, ſhould prevent us from diſparaging the efficacy of plaſters, fomentations, embrocations, and other external applications, ſo much as is commonly done. The conſequences of this opinion, in many caſes, has been, that the patient has been deprived of effectual ſuccour, the phyſician has loſt opportunities

of gaining reputation, and great advantage has been given to ignorant people, who, not knowing the theories of the learned, have therefore not been miſled by them, but have followed what is not unfrequently a better guide, traditional experience. After mentioning, as a farther confirmation of the doctrine, ſeveral inſtances of mental cauſes acting both in the production and cure of diſorders, our author next proceeds to conſider the ſeveral methods of relieving irritation.

The methods of relieving irritation may, he ſays, be referred to two general claſſes; thoſe which relax and moderate the force of the nerves, and thoſe which deſtroy the firſt ſtimulus, by ſubſtituting a ſecond. Under the firſt claſs are comprehended, bleeding, purging, emollient waſhes and poultices, with oily liniments. In the ſecond diviſion may be ranked opium, and the bark, with every ſort of nervous and corroborant medicine. That opium in reality acts by a ſtimulating quality, appears, ſays our author, from its effects when given in an over-doſe, or when applied to an inflamed part; in the firſt caſe, it produces vomiting and convulſions; in the laſt, it gives excruciating pain. And that the bark

bark alſo has a degree of irritation, will not be denied, when it ſo frequently purges, and when its taſte is ſo evidently pungent upon the tongue, eſpecially if ſore and tender. All kinds of foetid, bitter, and aromatic medicines, give equally certain marks of an irritating power. Camphor, in particular, has a moſt evident pungency. Now, ſays our author, there is not one of theſe ſubſtances that does not, in ſome inſtance or other, deſtroy a previous ſubſiſting irritation. When the irritation ariſes from the ſuffering of a particular part, nothing ſo certainly relieves it as opium. If, from natural debility of the nerves, gummous medicines, and if, from the attack of an intermitting fever, the bark in general is an expeditious remedy.

III.

Primae Lineae de cognoſcendis Mulierum morbis, in uſus academicos ductae. *A* Gualth. Van Doevern, M. D. *et Prof. Lug. Batav.* 8vo, Lugd. Bat.

THE publication before us, having been chiefintended by the author as a text-book for hi academical lectures, nothing very full or

particular can be expected on any of the ſubjects treated upon. He ſpeaks in general of the diſeaſes of women at different periods of life; viz. of young girls; of married women; of diſeaſes that occur in pregnancy; of puerperal diſorders; of ſuch as attend nurſing; and, laſtly, of thoſe to which women are liable at more advanced periods of life.

The diſeaſes of women are, by our author, divided into two claſſes, what he terms *univerſales* and *particulares*. Among the former are comprehended many diſorders to which men are liable in common with women. And the ſecond includes all ſuch diſeaſes as are peculiar to women. It is to diſorders of this laſt claſs that our author's obſervations are chiefly confined.

Diſeaſes of unmarried women are firſt taken into conſideration; the moſt material of theſe are, either a ſuppreſſion, or too great a flow of the menſes, the fluor albus, chloroſis, hyſterical affections, and furor uterinus. The moſt common cauſes of diſorders of this kind, we are told, are plethora; a vitiated ſtate of the genitals; a deficiency or ſome other morbid affection of the menſtrual flux; venereal deſires; too great a degree of ſenſibility and irritability; too great tightneſs

neſs, either in ordinary apparel, or in ſuch ligatures and machines as are had recourſe to for correcting any deformities of ſhape; and, laſtly, ſuch cuſtoms and other circumſtances in life, as do not properly correſpond with the nature of the climate in which they are practiſed.

From a variety of cauſes, but eſpecially from the plethoric ſtate of the ſyſtem which occurs in pregnancy, together with the great increaſe of ſize and change of ſituation which the uterus undergoes, women, during that period, become liable to many diſorders, not only of the abdomen, but likewiſe of the head and breaſt. Pains of the joints are alſo then common; as likewiſe cramps, oedematous and eryſipelatous ſwellings, varices, haemorrhagies, ulcers, ſwellings of the labia pudendae, together with many other diſorders of the genitals. Women in labour again become ſubject to a different ſet of complaints, particularly to falſe pains, difficult and ſlow births, uterine haemorrhagies that ſucceed the delivery, and convulſions. Theſe laſt ſet of diſorders may, we are told, depend on three different cauſes, viz. the mother, child, or midwife.

In the ſixth chapter of Dr Van Doevern's diſſertation, are enumerated the ſeveral puerperal diſorders

diſorders, the principal of which are, debility, pains in the abdomen, a morbid excluſion of the ſecundines, a diminution, ſuppreſſion, or redundancy of the lochia, inflammation of the uterus, with its conſequences, abſceſs and gangrene, the milk fever, purple fever, diarrhoea; and, laſtly, that fever which ſeems peculiar to inlying women, termed the puerperal fever.

In the following chapter, ſuch diſeaſes as occur to nurſes are taken notice of; and theſe, our author obſerves, proceed, in general, either from a diſeaſed ſtate of the ſecretion or excretion of the milk, or from ſome peculiarities in the breaſts which render them unfit for the purpoſe of ſuckling.

In the laſt ſection are taken into conſideration, ſuch diſorders as women at more advanced periods of life become liable to. Some of theſe may be the conſequence of old age, but the greateſt proportion, we are told, proceed from a ſtoppage of the menſes; which not only occaſions affections of the uterus and the contiguous viſcera, but of the whole body. An occurrence which, at this period of life, is far from uncommon, is, ſays our author, a convincing proof of the plethoric ſtate of the ſyſtem which then often prevails; and

and that is, the frequent appearances of the menſes long after the uſual period at which they leave women; ſome inſtances, he ſays, have occurred of their returning at the ſixtieth and even ſeventieth year of life.

IV.

Caroli Joſephi Oehme *Diſſertatio Inauguralis, de Morbis recens natorum Chirurgicis.* 4to, Lipſiae.

INDEPENDENT of the many hereditary diſorders which children receive from their parents, ſuch as lues venerea, arthritis, &c. there are others to which different parts of the body become liable, either from original mal-conformation, or from neceſſary violence in ſuch labours as happen to prove difficult.

It is to ſuch of the latter as more eſpecially require the aſſiſtance of ſurgery, that our author's obſervations are entirely confined. He treats ſucceſſively of tumors and depreſſions in the head from difficult births, of open ſutures, hydrocephalus, hernia cerebri, ſpina bifida, diſeaſes of the lips and eye-lids, of the tongue and fauces, of diſorders

orders of the breaſt, ſuch as abſceſſes in the breaſts and bronchocele; of diſeaſes of the umbilicus; all the variety of herniae; affections of the ſcrotum, urethra, penis, anus; and, laſtly, are conſidered diſorders of the extremities and common teguments.

In the cure of the hare-lip, the uniting bandage made with threads, which decuſſate, is much recommended. This invention, which by many had been attributed to the Engliſh, our author gives the credit of to a ſurgeon in Leipſic, who, we are told, was the firſt who ever had recourſe to it.

In that ſpecies of ranula which occurs in new-born infants, extirpation by the actual cautery is recommended both by Levrete and Delevrye; our author, however, points out a different treatment. If the abſceſs be only a collection of pus, he adviſes it merely to be opened; but, if contained in a cyſt, the cyſt, he ſays, muſt be deſtroyed, otherwiſe the tumor is very apt to regenerate.

The hiſtory of a bronchocele, or rather trachiocele, which came under our author's inſpection, is here related. It occurred in a new-born child;

child; and the tumor was ſo large, as to extend from the ear and cheek of the right ſide, down to the breaſt and very near the abdomen. It appeared evidently to communicate with the aſpera arteria, and to depend on an eruption of air; for, during inſpiration, and when the boy cried violently, the tumor increaſed; and, on the contrary, its ſize was regularly diminiſhed in the time of expiration. The patient having been under the management of a different practitioner, the treatment had recourſe to is not mentioned. In a ſimilar caſe, however, our author would recommend aſtringent ſpiritous fomentations, with a view to get the better of any laxity of parts that may prevail. And, if a continuance of ſuch applications ſhould not effect a cure, he would even adviſe the tumor to be opened, ſo that the diſeaſed fiſſure may be detected, and a coaleſcence, by proper bandages, be obtained. Another inſtance is mentioned of a congenital bronchocele, which appeared, however, to be of the ſtrumous kind. Swellings of this nature we are adviſed to let remain to a more advanced age, when either reſolution or extirpation may, with greater ſafety, be had recourſe to.

Such

Such tumors and abſceſſes as frequently occur in the breaſts of infants, are commonly attributed to the milk or ſerum which collect in them not being properly preſſed out. This our author allows, is ſometimes the caſe, but he is of opinion, that they more frequently proceed from the tight bandages which are commonly, though very improperly, applied to new-born children.

In treating of the different ſpecies of exomphalus, our author deſcribes a particular kind of tumor in the hypogaſtric region, to which infants are liable three or four days after birth. It frequently extends from the pubis to the umbilicus, attended with much pain and hardneſs. By diſſection after death, tumors of this kind appear evidently to be of an inflammatory nature; both the abdominal muſcles and peritonaeum are commonly found affected. They proceed, according to our author, from the blood in the umbilical cord not being properly preſſed out on the ligature being put on immediately after birth. Children, we are told, frequently die of this complaint: The remedies recommended are, glyſters, emollient fomentations, and plaſters of the ſame kind.

A full account is given by our author of the congenital hernia, in which the inteſtines deſcend by the proceſs of the peritonaeum, and lie in immediate contact with the teſtes. A ſimilar proceſs, he ſays, is found in women ſurrounding the round ligament of the womb; and a deſcription is here given of what may be termed a congenital hydrocele, in which the water collected is contained in this proceſs of the peritonaeum.

V.

Diſſertatio Inauguralis Chemico-medico de optima acetum concentratum, ejuſdemque Naphtham, conficiendi ratione, utriuſque affectionibus et uſu medico. Auctore Jo. Chriſtoph. Weſtendorf. 4to, Goettingae.

BEFORE proceeding to treat of the naphtha which may be obtained from vinegar, Mr Weſtendorf firſt enumerates the ſeveral methods commonly had recourſe to for the purification of that acid, viz. by means of cold, rectification, and diſtillation, either from verdigriſe, or from a ſaturated ſolution of ſalt of tartar. He recommends,

mends, however, for this purpoſe, an article which, he ſays, is ſuperior to every other, viz. the mineral alkali obtained from ſoda. From a ſaturated ſolution of this ſalt with vinegar, either of wine or beer, are procured cryſtals, in ſhape reſembling Glauber's ſalts; theſe our author recommends in preference to terra foliata tartari, as being not only more eaſily procured, but in reality more efficacious. To this ſalt in powder a half quantity of oil of vitriol muſt be added; and, from the mixture, may be obtained, by diſtillation, the ſtrongeſt concentrated vinegar. A mercantile pound of the ſalt treated in this manner yields, it is ſaid, a pound of vinegar, apothecaries weight.

For the preparation of naphtha, let an equal quantity of rectified ſpirit of wine be added to this acid; and the mixture being put into a retort, let nearly a half of the whole be drawn off by a diſtillation on a very gentle fire. To the liquid thus obtained, about a ſixteenth part of ſalt of tartar, diſſolved in four parts of water, being added, the naphtha immediately ſeparates, and ſwims like oil upon the ſurface. The longer the digeſtion ſubſiſted of the acid and ſpirit of wine, the larger always will be the proportion of naphtha. Its flavour is ſimilar to

that

that of Rhenish wine, and it is recommended by our author as an anodyne, and antispasmodic, especially in the tussis convulsiva of children. The dose must be somewhat larger we are told, than that of the vitriolic naphtha.

Concentrated vinegar prepared in the manner directed, does not act upon gold itself; but dissolves the calces of gold, as also those of silver, mercury, copper, lead, tin, and iron. Iron dissolved in it affords a red crystalline salt, of a sweetish, and somewhat astringent taste, and which gives to water a blood-red colour. With pure salt of tartar it yields long pointed crystals, which melt either in the open air, or with a very gentle heat.

Volatile sal ammoniac saturated with this acid, forms a limpid neutral liquid, which does not crystallize; but, when distilled in a retort, there comes over, together with a fluid, an icy pellucid kind of substance, easily soluble by heat, and which appears to be a true neutral salt.

This concentrated acid dissolves, we are told, calcareous earths, earth of allum, magnesia, phosphorus of urine, distilled oil of anthos, gum galbanum, copal, and camphor. It quickly coagulates

agulates blood, which is likewiſe ſo much hardened by it, as, in a few days, to be eaſily broke into pieces. Even blood, diſſolved by putrefaction, is not only coagulated by it, but is ſoon rendered perfectly ſweet.

The following articles ſtand in the order of affinity which they bear to this acid; phlogiſton; fixed alkaline ſalts; calcareous earths; volatile ſalt of urine; zinc; lead; mercury; regulus of antimony; ſilver; tin; iron; copper; gold.

The peculiarities of this acid are, that it is ſtronger than the other vegetable acids, and is alſo more volatile, penetrating, pure, and ſimple. It is ſo particularly antiſeptic, as to act powerfully in putrid diſorders, in doſes of twenty guts, given every hour in any convenient drink. It promotes ſweat and urine: Is recommended in caſes of gangrene, and of putrid ſore throats; in both caſes it is directed to be mixed with an equal proportion of honey of roſes. The ſteams of it, received by the mouth, are adviſed in caſes of angina; and it is greatly extolled in putrid ſcorbutic ulcers, in carious bones, ſpoiled teeth, and waſted gums.

VI.

VI.

Obſervations on Chronic Weakneſs. By Thomas Withers, M. D. 8vo, York.

THE term chronic weakneſs is here uſed by Dr Withers, to diſtinguiſh this ſpecies of weakneſs from that which occurs in acute diſeaſes; the one coming on ſuddenly, whilſt the other ſteals upon the patient by ſlow degrees. It is a term which is ſufficiently underſtood by every one who is in the leaſt converſant with medical writings; it being a diſorder to which perſons of all ages, of both ſexes, of every temperament, and in every climate, are liable.

The diſeaſe, we are told, uſually begins with morbid affections of the ſtomach, ſuch as flatulence, acidity, heartburn, and coſtiveneſs. A diminution of appetite, and a ſlight dejection of ſpirits, ſoon occur; the muſcular ſtrength is impaired, and the patient feels a languor, together with an unuſual averſion to motion. This diſpoſition to indolence continually grows ſtronger, and a ſenſe of wearineſs is eaſily induced.

By degrees theſe ſymptoms increaſe; the aliment is often taken without appetite, and is very

imperfect'y digeſted; hence ariſe diſtention of the bowels with air, and a regurgitation into the mouth, of the matter contained in the ſtomach. The head becomes affected with pain and giddineſs, the belly is ſometimes lax, and at other times an obſtinate coſtiveneſs takes place. The contractions of the heart are ſometimes ſlow, but generally frequent, and always weak; in conſequence of this, inſenſible perſpiration becomes languid, and the ſkin appears dry and contracted. In proceſs of time the patient's ſtrength is ſo much exhauſted, as that the leaſt exertion of muſcular motion exhauſts the nervous ſyſtem, deſtroys the appetite, produces ſickneſs, palpitation of the heart, and quickneſs of breathing. The mind becomes as much affected as the body; its efforts are weak and fluctuating; it is unfit for deep reflection, or cloſe attention to any particular ſubject. The memory is greatly impaired, and not exerciſed without a ſenſation of uneaſineſs; and that even in patients who before were remarkable for their firmneſs, vivacity, and acuteneſs of underſtanding. The ſyſtem is all along exceedingly irritable; and, in the progreſs of the diſorder, this irritability increaſes to ſuch a degree, as to become a ſource of great uneaſineſs to the

patient.

patient. Hectic fever at laſt takes place, which ending in nocturnal ſweats, a colliquative diarrhoea, or hydropic ſwellings, the patient is thus, after an uncertain term of years, exhauſted and carried off.

Theſe are the principal ſymptoms of the diſorder, as enumerated by Dr Withers; for all the various forms, however, which in different patients it puts on, the treatiſe itſelf muſt be conſulted.

Our author now proceeds to the conſideration of the ſeveral cauſes which may tend to the production of chronic weakneſs. It is probable, he thinks, that the immediate and proximate cauſe, conſiſts principally in an increaſed mobility of the nervous ſyſtem, and in a diminiſhed coheſion of the particles of matter which conſtitute the ſimple ſolid. This opinion, he thinks, is confirmed by the ſymptoms of the diſorder, as already enumerated, and will be farther ſupported, he ſays, from the conſideration not only of the prediſpoſing and occaſional cauſes, but alſo of the method of treatment. The occaſional cauſes being all ſuch as weaken the nerves, and relax the whole conſtitution; and the method of cure conſiſting chiefly of the application of theſe means, which

are

are efficacious in reſtoring the enervated fibres to a ſtate of vigour.

A variety of occaſional cauſes are here enumerated, the moſt material of which ſeem to be the following; hereditary weakneſs; too great a fulneſs of blood, from whatever cauſe it may have been induced; neglect of exerciſe; ſudden and violent exertions of ſtrength; want of ſleep; the compreſſion of any important organ, as may be frequently met with among women, from too tight lacing of their ſtays. Impure air is mentioned as a common cauſe of chronic weakneſs, hence large towns, and all places of public reſort, are ſaid to be very improper ſituations for patients labouring under ſuch ſymptoms. Too copious a flow of the milk in nurſing is another frequent cauſe; exceſs in venery; much expoſure to heat; all ſuch cauſes as weaken the ſtomach, deſtroy eventually, we are told, the tone of the whole ſyſtem. Beſides theſe, he enumerates exceſs of mental application, together with different affections of the mind, ſuch as grief, fear, anxiety, &c.; the unneceſſary and imprudent uſe of remedies, particularly of blood-letting, emetics, and purgatives; an imprudent uſe either of ſtimulants or ſedatives, as inſtanced in the uſe of bitters long continued, of tobacco, opium and

and other narcotics. The unnatural and imprudent treatment of pregnant and lying-in women, is taken notice of as another cauſe of this troubleſome diſorder; and that eſpecially with reſpect to keeping women in that ſituation too warm, too great freedom in preſcribing evacuations; and an unneceſſary uſe of inſtruments. The laſt cauſe mentioned, is that ſpecies of weakneſs which is frequently the conſequence of fevers and other acute diſeaſes.

In the following ſection of his diſſertation, Dr Withers treats of the diſtinction and prognoſtic of chronic weakneſs. Palſy is the firſt diſorder taken notice of, with which it may be confounded. Weakneſs, our author obſerves, is a predominant ſymptom in palſy; but it is weakneſs attended with diminiſhed ſenſibility; a morbid ſtate of irritability, on the contrary, accompanies chronic weakneſs.

The hypochondriac diſorder is, frequently, we are told, miſtaken for chronic weakneſs. When it occurs in a relaxed conſtitution, it conſtitutes indeed the ſame diſeaſe, the ſymptoms and treatment being the ſame; but, if it occurs in a perſon morbidly rigid, it is different in its nature, and requires a different method of cure, the

ſtrengthening

ſtrengthening remedies uſeful in one caſe, being found hurtful in the other. In all ſuch diſorders, therefore, it is of the utmoſt conſequence to obſerve whether the patient be of a relaxed or rigid conſtitution.

Hyſterical affections are diſtinguiſhed from this diſeaſe by the occurrence of fits, with the ſenſation of a ball in the throat, ariſing from a ſpaſmodic affection of that part, which ſometimes threatens ſtrangulation.

Chronic weakneſs, when accompanied with hectic ſymptoms, is, frequently, it is ſaid, miſtaken for a low nervous fever; by attending particularly, however, to the ſeveral ſymptoms of the two diſorders, there can be no great riſk of their being confounded. We are next warned againſt confounding this diſorder with gout, the ſymptoms of which are ſometimes ſimilar; and the chloroſis, it is ſaid, is generally no other complaint than chronic weakneſs.

The prognoſtic muſt be formed from the conſideration of many particulars, viz. the temperament, age, ſex, and profeſſion of the patient; the cauſes which appeared to produce the diſorder, the violence or mildneſs of the different ſymptoms,

toms, and the particular ſtage of the complaint at the time.

The method of cure in chronic weakneſs, is the ſubject of the laſt ſection. The author having had frequent opportunities of treating this diſorder, the remedies pointed out ſhall be ſuch only, he ſays, as by experience have been found ſucceſsful.

The indications laid down for the accompliſhment of a cure are three.

1. To avoid the occaſional cauſes of the diſorder.

2. To obviate particular ſymptoms that aggravate the complaint. And,

3. To reſtore the tone and vigour of the ſyſtem.

With reſpect to the firſt indication, the ſeveral occaſional cauſes already enumerated muſt be carefully avoided, particularly full living, indolence; and, if the unwholeſomeneſs of a profeſſion has contributed much to bring on the complaint, that profeſſion muſt be diſcontinued, otherwiſe the diſorder cannot poſſibly be removed. If the air of a large town diſagree with a patient, and weaken him, the country air is naturally to be preferred. Coolneſs being of great conſequence, the fires in common ſitting rooms ſhould be ſmall,

ſo

ſo as to preſerve the air of a moderate temperature. In bed the patient is directed to lie on a matraſs, in preference to feathers; and to keep himſelf always ſo cool as not to encourage a copious perſpiration. Too copious an evacuation of the ſeminal fluid ſhould be cautiouſly avoided; as likewiſe exceſs of ſtudy, which is ſo powerful an occaſional cauſe of chronic weakneſs, we are told, that very few men of learning are free from the diſeaſe.

In the ſecond indication mentioned, viz. the obviating of ſuch ſymptoms as ſeem to aggravate the complaint, we are favoured particularly with remarks on the following ſymptoms; indigeſtion, heartburn, and acidity, cholic-pains, coſtiveneſs, dejection of ſpirits, and want of ſleep. When indigeſtion comes any great length, it is particularly neceſſary to pay great attention to the diet; and a mixture of animal and vegetable food is recommended as the moſt proper. A diet conſiſting entirely of fleſh meat, has already been ſaid to be too nutritive; and vegetables alone as certainly produce indigeſtion, flatulency, pain, acidity, and purging; a mixture of the two, therefore, forms the beſt diet in this diſeaſe. To obviate indigeſtion, the aliment ſhould be taken

at

at every meal in moderate quantities, and of the moſt wholeſome kind, dreſſed in the ſimpleſt manner. In general, we are told, the fleſh of old animals is more eaſily digeſted than that of young ones, as affording a greater ſtimulus to the ſtomach; but, on this point, as different ſorts of animal food agree with different conſtitutions, nothing farther can be ſaid, than that the patient muſt be regulated by his appetite, and by repeated trials. With reſpect to vegetables, the ſame general rule muſt be obſerved, taking care always to employ ſuch as are found to be moſt eaſily digeſted.

Tea and coffee, which are to be conſidered as parts of diet, are, we are told, in conſequence of their ſedative quality, found to be ſometimes ſerviceable in chronic weakneſs, eſpecially if attended with ſpaſmodic affections. But, when uſed ſtrong, or in too great quantity, they often prove injurious to the nervous ſyſtem, by occaſioning tremors, heartburn, acidity, watchfulneſs, and dejection of ſpirits.

The too liberal uſe of wine, or of any ſpiritous liquors, accuſtoms the ſtomach to an unnatural ſtimulus, which increaſes its action, and conſequently deſtroys its tone; the ſtomach, eſpecially

ally in children, ſhould be cautiouſly preſerved from the action of ſtrong ſtimulants of every kind. From the neglect of this precaution, children, at very early periods of life, are found to labour under chronic weakneſs, complicated with gout and other maladies.

Although wines, however, as well as other fermented liquors, are, when imprudently taken, juſtly conſidered as poiſons; yet a few glaſſes of good wine after dinner and after ſupper, are frequently ſerviceable, our author obſerves, in diſorders of this kind; and that quantity will generally, he ſays, be found ſufficient, unleſs the patient has been previouſly accuſtomed to drink freely. Wine thus moderately uſed, he obſerves, obviates putreſcency, and promotes digeſtion; and gently ſtimulates without weakening the conſtitution.

When the patient is much troubled with heartburn, and acidity of the firſt paſſages, abſorbent, demulcent, and emetic remedies are recommended. Abſorbents, it is obſerved, by uniting with the acid in the inteſtines, form a neutral ſalt; and by this means obviate that acidity which is a frequent cauſe of the heartburn. We are cautioned, however, againſt uſing theſe medicines

to

to excefs; for, by deſtroying totally the acid of the ſtomach, they promote, it is ſaid, a putrid tendency in the animal fluids.

Colic-pains frequently depend upon too great a diſtention of the alimentary canal, in conſequence of over-plentiful meals; in ſuch caſes, they are removed by a more moderate way of living. When ſuch pains, however, ſeem to be of a ſpaſmodic nature, as they frequently are, opium, ſalt of hartſhorn, muſk, and aether, are recommended.

Coſtiveneſs is another ſymptom frequently troubleſome in chronic weakneſs, and muſt, by attention to diet, and the uſe of mild laxatives, be particularly guarded againſt.

Dejection of ſpirits is the next ſymptom taken notice of by Dr Withers. It generally requires he obſerves, the utmoſt attention of the practitioner, to palliate or remove it, as it is commonly connected with alarming apprehenſions, timidity of mind, and ſome degree of falſe imagination. The principal circumſtances to be attended to, in this caſe, as remedies, are, to keep the mind conſtantly engaged in buſineſs, or amuſement, and to take regular and moderate exercife. Want of ſleep is another very troubleſome

ſymptom

ſymptom common in this diſorder. It often ariſes, we are told, from the patient's lying too many hours in bed; ſeven or eight hours is recommended as ſufficient for any perſon to indulge in. Exerciſe, and even moderate labour, are adviſed as the beſt incentives to ſleep; with the want of which the active and laborious part of mankind are ſeldom troubled. Sometimes, however, it is neceſſary to have recourſe to antiſpaſmodics, and opiates.

There are ſeveral other ſymptoms, which, at times, occur in chronic weakneſs, which, as they commonly depend on the general debility of the ſyſtem, are to be removed by tonics, and ſuch other remedies as are found ſerviceable for the diſeaſe in general.

The laſt indication to be attended to is, to reſtore the tone and vigour of the ſyſtem. This important change is to be effected by the uſe of aſtringents, ſtimulants, and tonics. Theſe remedies, when prudently adminiſtered, ſtrengthen the ſyſtem; but they are often, we are told, employed in ſuch an improper manner, as to diſagree with the patient, and increaſe the diſeaſe.

The aſtringent remedies here recommended, are, uva urſi, oak bark, campeachy wood, tormentil

mentil and biſtort; as likewiſe allum, and galls. The boles, dragons blood, and Japan earth, are likewiſe recommended; but their operation is ſaid to be weak and uncertain.

Stimulants are a claſs of remedies that are extremely numerous; the following articles of this kind are recommended as the moſt efficacious, viz. Peppermint, cinnamon, lavender, canella alba, cloves, ginger, camphor, gum guaiac, Virginian ſnake-root, balſams, muſtard, horſe-raddiſh, caſtor, aſſa foetida, aether, ſalt of hartſhorn, wine, ſpirits, and common ſalt. Stimulants are eſpecially adviſed in chronic weakneſs, when that diſeaſe is accompanied with great languor and torpor of the living powers. They excite, we are told, the action of the nervous ſyſtem, accelerate the circulation, promote the diſcharge by the ſkin, and eliminate from the blood thoſe putreſcent particles, which are often retained in conſequence of languor and debility. They increaſe the periſtaltic motion of the alimentary tube; they retard fermentation, prevent acidity, and forward the digeſtion of the aliment. By this means, the appetite is improved, and the proceſs of nutrition carried on in a more perfect manner.

Tonics

Tonics are the laſt ſet of remedies taken notice of. The articles particularly recommended, are, cold bathing, the preparations of ſteel, chalybeate waters, bitters, and the Peruvian bark.

With reſpect to cold bathing, the degree of coldneſs in the water ſhould be proportioned to the patient's ſtrength of conſtitution; for, if the water be too cold, it will prevent, we are told, that ſalutary re-action of the heart and arteries, which is indicated after bathing by the ſenſation of a gentle univerſal warmth. To promote the re-action of the vaſcular and nervous ſyſtems, the patient is adviſed to have acquired, by exerciſe, a moderate degree of heat before going into the water. Among the ſeveral ſteel medicines had recourſe to in chronic weakneſs, the chalybeate water of Scarborough is particularly recommended; as likewiſe thoſe of Spa, Pyrmont, and Harrogate.

Bitters, together with the Peruvian bark, are recommended as valuable remedies in the cure of chronic weakneſs. The articles enumerated are, gentian, chamomile, tanſy, orange-peel, ſimaruba, zedoary, eleutheria, and columbo root.

In

In the exhibition of Jeſuits bark, the powder, when it agrees with the ſtomach, is recommended as the beſt preparation of it; and the cold infuſion is ſaid to be ſtronger than the decoction.

VII.

Societatis Medicae Havnienis Collectanea, cum figuris aëri inciſis. Vol. I. 8vo, Havniae.

THE ſociety to whom we are indebted for this work, conſiſts principally of phyſicians of eminence at Copenhagen. But, beſides practitioners in that city, they have adopted alſo into their number ſeveral foreign members. Among others, Drs Cullen and Duncan, of Edinburgh, have had that honour conferred upon them.

From the induſtry of Dr Tode, regius profeſſor of medicine, and one of the court-phyſicians at Copenhagen, who holds the office of ſecretary to this ſociety, we entertain the pleaſing hope that, from their labours, our work may often be enriched. The preſent volume contains about forty papers; but, without mentioning the titles of each of theſe, we ſhall give ſome account of what we reckon the moſt important.

De eximia ſalis tartari efficacia in rachitide. Auctore Petro Chriſtiano Abildgaard.—The ſubject of this caſe was a boy of ſeven years old, who laboured under rickets to a great degree. His inferior extremities were become ſtiff and immoveable; the abdomen flaccid; he was emaciated with a diarrhoea and conſtant ſweatings; and had five fiſtulous ulcers all running at the ſame time.

The following mixture was preſcribed, of which four ounces was taken daily. ℞ decoct. cort. Peruvian. ℥viii. ſalis tartari, ℥ſs. M.

In the courſe of a month, the patient was ſo far recovered as to be able to riſe from his bed, and to walk with ſome ſupport. At that time, the bark was changed for rubia tinctorum; and in leſs than four months the boy got ſo well, as to be able to walk with the aſſiſtance of a crutch, and the ulcers by that time were moſtly cicatriſed.

The ſalt of tartar was the only remedy which our author ſays he here depended on; and he has, on different occaſions, ſeen rickety people cured by a watery ſolution of that ſalt alone.

Inſania a morbo capitis externo obſervata. A Frid. Gab. Got. Sibbern.—In a girl labouring under mania, a ſlight ſwelling was obſerved on the left ſide

ſide of the head, near to the ſagittal and lambdoid ſutures. By the application of gum plaſters, the tumor came to ſuch a ſize as rendered it neceſſary to open it. On an inciſion being made into it, a thin kind of ſerum was diſcharged, and the cranium at that part was found carious. From the time the ſwelling was opened, the patient began to recover, and came gradually to the uſe of her ſenſes. By proper management the ſore was healed up. In the courſe of treatment it appeared, that the patient had formerly laboured under tinea capitis; which made our author ſuſpect the tumor in queſtion to have proceeded from a retroceſſion of that diſorder; and endeavours were accordingly uſed to occaſion a return of the eruption, but without effect.

Herpetis exedentis curatio. Auct. Frid. Lud. Bang.—A patient had laboured for two years under a herpes exedens on one of the hands; the fingers were much ſwelled, excoriated, and in ſome parts ulcerated; and the matter diſcharged was a thin ichor. A doſe of jalap was preſcribed every fourth morning as a purgative; and an electuary was ordered, conſiſting of two parts of Jeſuits barks and one of ſaſſafras. As external applications, he was directed to uſe ole-

um palmae, and frequent bathing of the parts, as ſoon as the ſkin was ſo ſtrong as to admit of it. In a few weeks, by a continuation of this treatment, the diſeaſe was removed.

Obſervationes circa aërem in ſanguine et humoribus contentum, quibus ſimul nova pathologia ſcorbuti adjungitur. Auctore Jo. Henr. Schonheyder.—The nature, origin, and effects of this ſpecies of air, is here inquired into by our author; and his opinion is, that the greateſt part of it is tranſmitted immediately to the blood, in a ſemi-elaſtic ſtate from the alimentary canal. He is not of Dr M'Bride's opinion, with reſpect to the ſcurvy proceeding from a deficiency of fixed air in the ſyſtem; but imagines that diſeaſe to depend entirely on an alkaleſcent ſtate of the fluids; and recommends, therefore, a courſe of acefcents, as the beſt method of treatment.

De placenta in orificio uteri irradicata. Auctore Mathia Saxtorph.—This particular ſituation of the placenta occurred ſo frequently in the courſe of a ſhort time to our author, that he is led to conclude, that particular kinds of births may, at different periods, become epidemic as well as other diſeaſes. Eight caſes of it, we are told,

told, occurred to him in the ſpace of ſix months; whereas, in the former part of his practice, and in the courſe of three thouſand ſix hundred labours, he had never obſerved more than one ſingle caſe ſimilar to theſe.

Haemorrhagies in the laſt month of pregnancy, preſage, we are told, this ſituation of the placenta. One of the women, alluded to by our author, ſuſtained five returns of haemorrhagies; another three returns, and in two they returned only twice. The labour-pains in ſuch caſes are always ſo weak, and come on ſo inſenſibly, that they are ſometimes ſcarcely perceived. For putting a ſtop to the flux of blood after the birth is over, gentle preſſure with the hands upon the abdomen is recommended as the moſt effectual remedy.

De ſimpliciſſima methodo tractandi puerperas, in domo obſtetricia regia Havnienſi, anno 1773 *obſervata.* Auctore Jo. Philip. Rogert.—The greateſt ſimplicity, we are told, is obſerved in every circumſtance relating to delivery in this hoſpital for lying-in women. The woman is never placed in the chair in which ſhe is to be delivered, till the internal orifice of the womb is ſo much dilated, as to allow the child's head to protrude externally. The

perinaeum is directed not to be depreſſed by the midwife, as is commonly done, but merely to be ſupported by the hand, ſo as to prevent any riſk of its being ruptured. The placenta, after being thoroughly ſeparated from the uterus, is extracted; but, although an entire ſeparation may not take place till twenty hours even after delivery, no force whatever is uſed in taking it away. In no caſe whatever, but when the greateſt danger is evident, ſhould the hand, we are told, be introduced into the uterus. In the evening of the ſecond day after delivery, an injection is ordered, with a view to diminiſh or prevent the milk-fever.

Theſe, and other directions, are given with reſpect to natural births; and, ſo great is the proportion of natural births to others, that, out of three hundred and thirty-ſeven, which occurred in the preceeding year, two hundred and ninety-five were of that kind. When ſuch births advance ſlowly, blood-letting, with ſmall doſes of laudanum, are recommended as the beſt remedies for bringing them quickly forward.

In caſes of difficult labour from an oblique ſituation of the womb, if the obliquity is not conſiderable, we are directed to truſt entirely to nature. And when more conſiderable, before the forceps

forceps are had recourſe to, blood-letting is adviſed, together with anodynes, camphor, and nitre.

No kind of roller or bandage whatever is allowed to be applied to the abdomen after delivery, ſo that the flux of the lochia is always exceedingly free; and this, our author thinks a moſt material circumſtance in every labour, as no other evacuation ſo effectually prevents inflammation.

Among all the deliveries our author had been preſent at in this hoſpital, only two caſes of puerperal fever occurred. One of the patients recovered, and the other was carried off on the fourth day after delivery. On opening the body after death, the abdomen was found full of a purulent foetid matter, which ſeemed to adhere to the inteſtines. The omentum was almoſt entirely putrified; the uterus externally appeared contracted, and ſlightly inflamed towards its bottom. On being laid open, it was found filled with coagulated blood; in its neck it was entirely ſhut, although the os tincae remained open. The ovarium of the right ſide, as likewiſe the broad ligament of the womb, were almoſt totally mortified.

VIII.

Mathaei Franciſci Alix *Medicinae et Chirurgiae Doctoris*, &c. *Obſervata Chirurgica. Faſciculus* I. 8vo, Altenburg.

IN the firſt caſe of this collection, we are preſented with obſervations on different ſubjects, of which the following ſeem to be the moſt important.

De fulmine tacto aqua vegeto minerali Goulardi concentratiori feliciter curato.——The left leg was the part chiefly affected; it was greatly ſwelled, of a livid appearance, and perfectly inſenſible. Goulard's water was applied to the parts, but without any evident advantage; the proportion of lead, however, being increaſed, the patient, in the courſe of a few hours, felt a ſlight titillation, and began to move the limb. The ſame application, together with the uſe of the bark inwardly, being continued, a thorough recovery was very ſoon obtained.

De glandulae thyroideae affectu. A large ſwelling upon the thyroid gland, which ſeemed to contain matter, being laid open, a conſiderable quantity of extravaſated blood was firſt diſcharged.

ged. Upon going deeper, the whole ſurface of the abſceſs was found covered with a hard, calcareous kind of matter. The arteries of the thyroid gland were found enlarged, conſtituting a ſpurious aneuriſm. The patient, we are told, ſoon died apoplectic.

De abſceſſu in regioni inguinali. Upon opening an abſceſs in the groin, the peritonaeum was found to be laid bare. A plentiful ſuppuration enſuing, that membrane exfoliated or caſt off ſo effectually, as to leave the gut which it had covered quite naked. The wound, however, diminiſhed daily, and in a ſhort time was cicatriſed. But the tumor returning, with an evident fluctuation of matter, it was again opened, when, together with the matter contained, there was diſcharged a pledgit, which, by want of proper attention, had been allowed to remain in the ſore when it was formerly open. The cure now went properly on, and, in a ſhort time, was thoroughly compleated.

Hydrops univerſalis.—In a caſe of obſtinate dropſy, that had reſiſted all the uſual remedies, cantharides were had recourſe to with the greateſt ſucceſs. Four grains, diluted with a large quantity

tity of barley-water, acted as a very powerful diuretic; and a fourth part of that quantity was afterwards given at three different times. Bark, ſalt of wormwood, and rhubarb, were alſo preſcribed, and, in the courſe of ſix weeks, a perfect cure was obtained. In about eighteen months, however, from that period, the diſorder returned, when cantharides were again adviſed, but with no effect. Their failure at this time, our author attributes to the irritability of the patient's ſyſtem being diminiſhed, in conſequence of a greater degree of debility which now took place. A cure, however, was again effected by recourſe to inciſions, ſalt of wormwood, bark, and rhubarb. Cantharides are much recommended by our author, in all ſuch caſes as do not yield to the uſual remedies.

Inflammatio venaeſectionem ſecuta.—In this caſe is related the hiſtory of an inflammation of the arm, attended with acute pain; it had proceeded from the puncture of a nerve, our author imagines, in blood-letting, as he does not think, with Heiſter, Garengeot, Haller, and others, that ſuch an occurrence from that operation is ever owing to a punctured tendon. A cure was here effected

effected by the application of eſcharotics to the wounded nerve, as recommended by Foubert; together with cataplaſms of Goulard's ſaturnine water.

Hiſtoria valde curioſa brachii ſphacelo corrupti. In a caſe of mortification of the arm, all the uſual remedies were had recourſe to without effect; the diſeaſe increaſed daily, and advanced ſo much, that the arm became gangrenous through its whole length. It became hard and black, to ſuch a degree, as nearly to reſemble dried ſmoked meat. It was perfectly free from all putreſcency of ſmell, was not attended with pain, and the patient, in other reſpects, enjoyed very good health. In a ſhort time the arm ſeparated of its own accord, and fell off from the body; no haemorrhagy occurred; and the parts with which it had been conjoined ſoon became ſo dry, as to diſcharge no kind of fluid whatever. The old man, the ſubject of this caſe, remained, we are informed, in perfect health.

De tendine Achillis diſciſſo, artificioſa deligatione feliciter ſanato.—The moſt remarkable circumſtance in the hiſtory of this caſe, is, that ſuch an effectual cure was obtained in the courſe of a fortnight,

fortnight, that the patient, at the end of that time, went about his ordinary buſineſs without any inconvenience.

IX.

Chirurgiſche Wahrnehmungen, von Johann Lebrecht Schmucker, *Königlich-Preuſſiſchen Erſten General-chirurgus von der Armee*, &c. &c. i. e. *Chirurgical Obſervations, by* John Lebrecht Schmucker, *firſt Surgeon to the Army of the King of Pruſſia: In two Parts. Part.* I. *On Wounds and Diſeaſes of the Head. Part* II. *On Diſeaſes of the Breaſt, Abdomen, and Extremities.* 8vo, Berlin.

THE author of theſe obſervations, in his attendance on the armies and hoſpitals of his Pruſſian Majeſty, having had more experience in the ſeveral diſorders treated of than can often be ſuppoſed to fall to the ſhare of one man; the publication of them muſt, therefore, it is imagined, prove very acceptable to the public.

The greateſt part of the firſt Part, is taken up with the conſideration of wounds of the head; from

from which it appears, that both in the diagnoſis, prognoſis, and method of cure in ſuch accidents, we are as yet very deficient.

One of the moſt unaccountable circumſtances, attending affections of this nature is, that, in many caſes of wounds of the head, eſpecially in thoſe from gun-ſhots, which at firſt, and for many days after being inflicted, appear to be attended with no kind of danger, at laſt turn worſe, and frequently carry off the patients. Twelve caſes are here related which occurred at one of the many memorable ſieges of laſt war, which all proved fatal, after the patients, for many days, had remained perfectly free from every bad ſymptom; and in which, nothing outwardly appeared, farther than the bone being either merely denuded, or otherwiſe very ſlightly affected. The trepan in all of them was had recourſe to, but without either being of ſervice, or able to detect the cauſe of the different ſymptoms.

On opening the heads of ſuch patients after death, either pus was found diffuſed upon the pia mater, or a gelatinous ſemipurulent kind of matter

matter was obſerved. Moſt frequently the brain itſelf appeared perfectly ſound.

The cauſe of death in caſes of this nature is attributed, by our author, chiefly to an affection of the tunica arachnoidea, and of different lymphatics. The contuſion occaſioned by gunſhot-wounds and ſimilar accidents, produces always, he ſays, an effuſion and ſtagnation of lymph, which in cachetic debilitated ſubjects, (ſuch as ſoldiers commonly are at the end of the campaign in a tedious war), is with difficulty abſorbed, and is commonly therefore either converted into pus, or a thin ichor.

This view of the cauſe of the diſorder, firſt ſuggeſted to our author the propriety of aſtringent applications in ſuch caſes; and he has frequently, we are told, employed them with the greateſt advantage. The following is an application of this kind he has often uſed with ſucceſs, and is a form which he ſeems to prefer to all others. To forty pounds of cold water, add four pounds of vinegar, ſixteen ounces of nitre, and eight ounces of ſal ammoniac. The part affected is ordered to be frequently well bathed with this, at the ſame time that blood-letting is preſcribed, together with the internal uſe of nitre, ſtimulating

ſtimulating injections, and laxatives. In all the ſlighter affections of the head, the greateſt ſucceſs, we are told, has been obſerved from ſuch a courſe; and, even in ſuch as have required the trepan, our author has often, he thinks, ſeen it put in practice with advantage. In concuſſions of the brain, even without any external wound, cold epithems and fomentations are ſaid to be very ſerviceable, eſpecially if conjoined with ſtimulating glyſters, and the application of leeches to the temples.

A variety of intereſting obſervations, with reſpect to other affections of the head, are afterwards inſerted. In one caſe, a locked jaw occurred, in conſequence of a wound on the right ſide of the head with a ſword. The trepan was twice applied, but without advantage; when a collection of matter under the temporal muſcle being obſerved, and afterwards evacuated by cutting through that muſcle, the ſpaſm was effectually removed, and a cure of the wound eaſily obtained. Another caſe of the ſame kind is afterwards related, in which evacuating the matter contained below the temporal muſcle proved effectual, after the trepan had been four times applied without any advantage.

Several

Several caſes of gunſhot-wounds in the forehead are related, in which the trepan was applied to the os frontis with the greateſt advantage. In wounds of the cranium, thoſe made with ſharp cutting inſtruments, always terminate much more eaſily, we are told, than thoſe occaſioned by ſuch as are more blunt or obtuſe. Among many remarkable caſes, which we are afterwards favoured with, one is related, in which part of the cortical ſubſtance of the brain was cut out with a ſword, and a cure was in due time eaſily effected.

Violent concuſſions of the brain are often produced, our author obſerves, merely from the paſſage of cannon balls near to the head, without any external affection being obſervable. In ſuch caſes, and in all ſimilar concuſſions, emetics, we are told, are commonly attended with the beſt effects; venaeſection, however, muſt always be premiſed to the uſe of theſe remedies. Emetics, after blood-letting, are likewiſe recommended by our author, in a ſpecies of blindneſs, which he has frequently known ſoldiers to be ſeized with from making long marches in ſultry weather. In ſome caſes, one blood-letting, and a ſingle vomit the following day, have proved effectual;

tual; on other occaſions different repetitions of both remedies have been neceſſary.

When treating of ophthalmia, leeches to the temples and eyelids are much recommended; but our author is greatly againſt ſcarifications of the tunica conjunctiva, as adviſed by many. As a corroborant for that ſpecies of relaxation, common in ophthalmia, a collyrium is recommended, of eight ounces of roſe-water, two drachms of allum, and a ſcruple of ſaccharum ſaturni.

A full account is given by our author, of a ſpecies of blindneſs ſometimes produced by a tranſlation of the matter of gonorrhoea to the eyes. In ſuch caſes, antiphlogiſtic remedies are adviſed to be applied to the eyes, together with blood-letting, nitre, and other cooling medicines inwardly; at the ſame time, that emollient cataplaſms ſhould be applied to the penis and perinaeum, with a view to ſolicit a return of the diſcharge to theſe parts.

In treating of ganglia, or ſuch tumors of the encyſted kind as contain an inſpiſſated kind of lymph, we are adviſed, after making a ſimple inciſion into them, to evacuate their contents, and afterwards to obtain a reunion of the parts

by means of the dry ſuture. In the ſmaller ſwellings of this kind, a cure, we are told, may almoſt always be obtained, by gentle frictions with ſoap diſſolved in ſtrong ſpirits of wine.

The ſecond volume of our author's work commences with the conſideration of diſorders of the breaſt. Some caſes are related, in which muſket-bullets paſſed through the lungs, and which were afterwards happily cured. In wounds of the breaſt, tight bandages are much condemned; and, in place of a great number of ſmall doſils, with which ſuch wounds are commonly covered, one large doſil or cuſhion is rather recommended. The beſt method of preventing emphyſematous ſwellings in wounds penetrating into the cheſt, is to enlarge and keep open, we are told, the external openings, which effectually prevents the air from within diffuſing over the cellular membrane. Of many remarkable caſes of wounds in the breaſt and abdomen related by our author, we ſhall here mention two. A ſoldier received a ſhot with two bullets at the ſame time, one of iron, and the other of lead. On the latter being extracted, as no others were at the time ſuſpected to have entered, the ſore was healed up. In the courſe of ſixteen years, however,

ever, a large iron bullet was taken out from the region of the liver. Another ſoldier was wounded through the diaphragm in the right hypochondrium; and, although a paraphrenitis ſucceeded, attended with violent laughter, crying, and vomiting, yet a cure at laſt was obtained.

In treating of cancer, extirpation is mentioned as almoſt the only remedy to be depended on. And this operation, our author ſays, he has, on many occaſions, had recourſe to in open cancers of the mamma, with the greateſt ſucceſs; and that even in the very worſt caſes of that kind, when, to all appearance, the diſeaſe had ariſen from an internal cauſe, and when the different ſymptoms of hectic had occurred. Cicuta we are deſired by no means to depend on in this diſeaſe. Many experiments are here related, made with that remedy procured directly from Vienna; but, inſtead of being of any advantage to the patients, almoſt all of them ſeemed to ſuffer much from its uſe; in ſome of them, great debility was induced, and, in others, ſuch tremors of the joints, as they did not again recover from.

Our author afterwards treats ſucceſſively of the paracenteſis of the abdomen, of the different ſpecies of hernia, hydrocele, aneuriſm, and lithoto-

my. In cutting for the ſtone, he determines, after a great deal of experience, in favour of the great apparatus, as recommended by Le Dran; as it always, he ſays, proves much more ſucceſsful than even the lateral operation.

We are commonly directed, our author obſerves, in thoſe caſes of gunſhot-wounds where any of the extremities are carried off, to amputate immediately above the part. In all ſuch caſes, however, amputation, he ſays, ought by no means to be had recourſe to; for, from extenſive experience on this point, he has long been convinced, that fores produced in this manner, heal with much greater eaſe, and with leſs riſk to the patient, than thoſe which are left after the amputation of any member. He even adviſes us not to take off ſuch parts of ſplintered bones as happen to protrude in caſes of this kind; for they always, he ſays, in due time, ſeparate, of their own accord, a conſiderable way within the margin of the ſoft parts. A variety of caſes of gunſhot-wounds are related, in which, without having recourſe to amputation, complete cures were obtained, although different bones had been very much ſhattered.

Our

Our author concludes this publication with a variety of judicious obſervations on the treatment of thoſe bit by mad dogs; and the propriety of every article recommended, is confirmed by the enumeration of different caſes, which had been treated in the manner preſcribed. Such wounds are directed to be immediately waſhed clean; and, after deep ſcarifications being made into them, the parts are to be immerſed in warm water, with a view to encourage a flow of blood. The wounds are afterwards to be ſprinkled with the powder of cantharides, and a bliſtering-plaſter to be applied over all.* This treatment muſt be continued for eight or ten days, and the wounds, by proper digeſtives, ſhould be kept running for at leaſt a month. Internally, frequent doſes of nitre and camphor are recommended.

* See Dr. Hargiller's Paper on this Subject in Vol. 5 of Medical Inquiries p. 214 to 296

The extirpation of that tendon, commonly termed the *worm*, from the under part of the tongue in dogs, with a view to prevent their doing harm when mad, is recommended by our author, in conſequence of different experiments which he himſelf put in practice in order to determine the propriety of it.

SECT. II.

Medical Obſervations.

I.

The Hiſtory of a remarkable wound in the Trachea and neighbouring parts. *By Mr* James Stark, *Surgeon in* Calcutta.

UPON the 25th day of October 1775, I was requeſted to viſit an European that had cut his own throat, a few hours before I was called, but I was told he had ſtill ſome appearance of life remaining.

When I went to the place, I found him lying upon the ground, with his throat cut from ear to ear, and an immenſe effuſion of blood all around. Upon moving him, I found that there was

was a good deal of ſtrength remaining, notwithſtanding the great loſs of blood. I therefore began to examine the wound, which had the following appearance.

The external jugular veins on both ſides were perfectly divided; the carotid arteries laid bare; the trachea arteria divided from the larynx immediately above the pomum adami; the epiglottis and glottis, along with the os hyoides, perfectly detached from the rima glottidis; the pharynx cut through, except about a finger's breadth of the back part, which was very much ſtretched; for the trachea thus divided, had retracted equal with the clavicles, as had alſo the fore part of the oeſophagus, which very much ſtretched the remaining fibres of the pharynx. As the os hyoides was perfectly detached from the rima, conſequently every muſcle that ariſes from the different cartilages, &c. of the wind-pipe, and which are inſerted in the os hyoides, were cut through. Finding matters in this ſituation, I thought any attempt would be perfectly in vain, as he muſt certainly expire in a few hours. However, as the effuſion of blood was ſtopped, and he ſtill had a good deal of ſtrength remaining, I was willing to give him every poſ-

ſible chance. Therefore, after waſhing the cloated blood from the wound, I endeavoured to attach the fore-part of the oeſophagus to the pharynx with needles and waxed thread; but found it very difficult to accompliſh, as the wound was very jagged, the patient averſe to have any thing done for himſelf, and the pricking of the needles brought on violent reaching to vomit, ſo that the contents of the ſtomach were evacuated by the wound. I next endeavoured to attach the trachea to the larynx, which was likewiſe difficult on account of the conſtant convulſive coughing; however, it was at laſt done, and the patient, in this ſituation, could ſwallow a little water, tho' the greateſt part ſtill ran out by the wound. I then applied ſlips of adheſive plaſter near the edges of the external wound, and, by means of the quilled future, brought the lips in contact in every part, except where the threads of the internal wound protruded, and then dreſſed the whole with dry lint. That the more care might be taken, I had the patient carried to my own houſe, where I immediately ordered his belly to be opened with glyſters, and that he ſhould have nothing whatever given by the mouth; but that he ſhould be entirely ſupported by nutritive glyſters,

ſters, adminiſtered every two hours, and that he ſhould be kept as much at reſt as poſſible. Next day I found him perfectly free from fever, his pulſe ſmall, but ſlow and regular. The weather at this time was pretty hot, and made me afraid of putrifactive ſymptoms; I therefore ordered that he ſhould have a glyſter of ſtrong decoction of bark twice a-day, and that he ſhould retain them as long as poſſible. The ſecond day he was much the ſame, only his pulſe was quicker, as was his breathing; he likewiſe had a frequent tickling cough, but no appearance of ſuppuration on the wound. On the third day, a pretty plentiful diſcharge of matter and mucus took place, and every bad ſymptom diſappeared, except the cough, which was rather more troubleſome, from part of the matter diſcharged falling into the top of the windpipe. The fourth and fifth days he was much the ſame; but, on the ſixth, matters took a very different turn, as now he had every appearance of ſymptomatic fever, from an abſorption of matter having taken place: His ſkin, before moiſt, was now very hot and parched; pulſe quick and ſmall; the diſcharge from the wound very ichorous and offenſive, and the parts adjacent very hot; his breathing quick, and in-

ſpiration

ſpiration very difficult, with a loud rattling noiſe, and altogether extremely reſtleſs and uneaſy. As the ſymptoms of fever increaſed very faſt, I now thought that he had no chance whatever; however, I ordered that hot dreſſings ſhould be applied to the wound, that the number of bark glyſters ſhould be increaſed, and that he might be allowed to ſmoke a * chirrutt, for which he had a great deſire, as it promotes expectoration, and perhaps might aſſiſt in bringing back a diſcharge of matter from the wound. He continued in this ſituation all the next day and the following. But, on the ninth, when I expected to have found him dead, how much was I ſurpriſed to ſee him perfectly free from fever, his ſkin moiſt, and a thick diſcharge from the wound, hardly in any degree offenſive. I continued the ſame regimen and dreſſing as already mentioned, and with theſe new appearances conceived freſh hopes. Next morning, upon unbinding the wound, every thing looked the ſame, only all the ſtitches had given way, and the windpipe and gullet had retracted as before. Now I had a full view of the whole extent

* Tobacco leaves rolled up hard, about the ſize of a finger, which is lighted at one end, and the ſmoke drawn from it by the other put in the mouth.

extent of the wound, which was really ſhocking to behold; for, between the os hyoides and the clavicles, there was only one continued gaſh, which looked as if the windpipe and the gullet had been cut out entirely.

All along he complained very much of thirſt; and, by pointing to his belly and mouth, ſhowed evident marks of being very hungry. I had once or twice allowed him to make an attempt to ſwallow water, but after the firſt or ſecond day he could not get down a ſingle drop, the whole coming out at the external wound, and frequently endangering ſuffocation, by part falling into the top of the windpipe, and ſo producing violent convulſive coughs. He was at this time very much reduced, and I was afraid that I ſhould not be able to nouriſh him by the preſent mode till a reunion took place. I therefore removed the ſtitches entirely, and attempted to introduce nouriſhment by the external wound, by means of a bent catheter that had a bladder tied to it. But the catheter had no ſooner touched the top of the gullet than it produced violent efforts to vomit, and convulſive coughing, which tore the wound quite open. Finding that this method would not ſucceed, I laid it aſide, and truſted to ſtrong

ſtrong nutritive injections only. I again put in a ſtitch or two in the fore part of the windpipe, but ſoon found that they could be of no ſervice; for they not only prevented a reunion, but kept up a conſtant irritation on theſe ſenſible parts. I, therefore, next day, removed them, and only continued the ſtitches in the external wound; for the mucus and matter now prevented adheſive plaſter from ſticking: And, in order that there might be very little ſtreſs on the external ſtitches, I kept his chin confined cloſe to his breaſt, by means of pillows under the head, and a night-cap, with ſtraps that tied under the arm-pits. About this period, ſmall granulations of fleſh made their appearance in the wound, and I now entertained ſome hopes, provided he could be ſupported by the anus for a ſufficient length of time. But his being much reduced, and his pulſe hardly perceivable at this time, rendered it highly improbable. However, he continued in this way, without any unfavourable ſymptom, unleſs his being more weak, till the twenty-fourth day from the accident. On this day I was much ſurpriſed, upon coming home, to ſee him ſitting up in bed, with a plate before him, which contained boiled rice. I aſked if he had ſwallowed any, to which he made

ſigns

ſigns that he had, by patting his belly, and expreſſing great joy in his countenance. I deſired he would make another attempt, and found, to my great aſtoniſhment, that he could ſwallow ſome, though by much the greateſt part came out by the wound.

This diſcovery gave me great pleaſure; I therefore allowed him to continue; and he got ſo much better, and could ſwallow ſo well in a few days, that I diſcontinued the injections. He now could ſpeak ſo as to be underſtood, and could ſwallow fluids without loſing much. About the end of ſix weeks from the accident, the external wound healed up entirely, except over the pomum adami, which, by being a little hurt, gradually ſeparated; and, as the ſeparation was very ſlow, a ſmall part of the external wound turned fiſtulous, and ſo left a paſſage into the windpipe, through which he could breathe at pleaſure, though he generally breathed by the mouth, as before, and could ſwallow either liquids or ſolids, without any part coming by the wound.

I now judged him out of all danger from the accident, and allowed him to walk about the ſtreets, by which he recovered ſtrength, ſo much as to be able to walk about a quarter of a mile,

and

and give his evidence before the grand jury concerning the murder of an European, to which he was the only witneſs.

It was now my intention, in a day or two, to remove the callous edges of the little fiſtulous hole in the fore part of the windpipe, in order to produce a perfect union. But Chriſtmas-eve intervened, which was juſt two months from the accident, he went out and came home in the night drunk, but went to bed, to all appearance, in very good health. The morning after that, he was ſeen by my ſervant walking about with a chirrut in his mouth, ſmoking, as uſual. From the quantity of liquor he had drank over night, ſickneſs was produced; and, in the action of vomiting, ſome of the remains of the liquor had probably got into his windpipe, for he fell back on his bed, and expired in an inſtant, before any one could come to his aſſiſtance.

As I had taken ſo much pains to promote his recovery, I was ſorry for the accident; but, at the ſame time, I was amply rewarded for my trouble; for it afforded an excellent opportunity of ſeeing what nature had done in ſo extraordinary a caſe.

After

After his death, in preſence of three gentlemen of the faculty, the trachea and gullet were taken out from the ſternum to the root of the tongue. We found that nature had effected a perfect reunion of all the injured parts. The os hyoides was rejoined to the windpipe in the fore part, by means of a ſoft but tough ſubſtance, which occupied the place of the ſcutiform and thyroid cartilages. The rima glottidis was attached to the ſides of the os hyoides by a tough membranous cicatrix, which marked the extent of the wound in its firſt ſtate. All the muſcles that are inſerted in the os hyoides, and originate from the cartilages, &c. had, after being cut through in the accident, retracted, and on one ſide formed a large and hard ſubſtance, about twice the ſize of the pomum adami.

Had it not been for the large cicatrix, the retraction from the diviſion of the muſcles and the ſmall opening into the fore part of the windpipe, it could not have been perceived that any injury had been ſuſtained. The glottis and epiglottis had regained their former ſituation and action, and nature had fully ſupplied every deficiency.

I am fully perſuaded that the man would have found little or no inconveniency in his future life,

life, had he not been cut off by an accidental occurrence. I was ſo much convinced of this, that, before the coroner and his inqueſt, I, and another ſurgeon, gave it as our opinion, that he died by accident, and not from the wound.

This caſe I conſider as one of the moſt remarkable among thoſe of ſurgery; and I do not know ſuch another upon record: Conſider the ſituation of the wound, the parts ſo injured, the mode by which nature was ſupported for ſuch a length of time, the climate, &c. and the cure will appear almoſt a miracle, hardly to be credited. However, it ſerves to ſhow, in the fulleſt extent, that, as long as life remains, we ſhould perſevere to adminiſter relief to the utmoſt of our power.

During the cure, I called in many of the medical gentlemen in Calcutta, who all declared the caſe incurable, and I was fully of this opinion myſelf; however, the event ſerved to prove that we were all miſtaken.

II.

II.

The Hiſtory of a Puerperal affection terminating in a Diſcharge of Pus from the Umbilicus. By Mr James Carmichael, *Surgeon at Port-Glaſgow.*

JEAN HILLAM, aged nineteen, was delivered of her firſt child, at the full time, after twenty-four hours hard labour, on the 12th of July 1770. The placenta was extracted inſtantly, and with violence. The lochia were ſcanty, otherwiſe ſhe was in a good way. She ſat up on the 17th for the whole day, and was without complaint till mid-night, when ſhe was ſeized with violent pains over all her belly and back, anxiety about the praecordia, faintneſs, great ſweatings, conſtant vomiting, frequent ſtools, with gripes, and intenſe thirſt. To theſe ſymptoms, continuing, was added a large diffuſed ſwelling of the abdomen, which was perceived on the 22d, attended with pain about the umbilicus, which was inflamed, and a gentle ſuppuration followed. Her belly became very ſore to the touch. On

the 30th, above four pounds of watery pus were diſcharged from the umbilicus, with immediate relief from all her ailments, and a moderate return of the lochia.

I accidentally ſaw her, for the firſt time, on the 14th of Auguſt. There had been a daily diſcharge of about four ounces of well digeſted pus from the navel, for a long time, but it had now decreaſed. The lochia ſtill continued. She complained of great weakneſs, chiefly of her back, ſo that ſhe walked in a bending poſture forwards; ſhe had little appetite for food; nauſea and faintneſs, at times; great thirſt; and, from the 30th of July, when the diſcharge firſt began, ſhe could lie on the right ſide only. Her pulſe was ſmall and quick. She had taken very little medicine, from which ſhe was not ſenſible of any relief.

In this ſituation I did not preſcribe for her, but truſted the cure to the natural progreſs of the diſeaſe; and, when I ſaw her again, which was not till the month of November, the diſcharge from the umbilicus was quite gone, and ſhe was recovering faſt. I had again an opportunity of ſeeing her in the month of January 1771; ſhe

was

was then perfectly well, but ſtill ſhe could not lie on the left ſide.

III.

Caſe of violent Spaſms which ſucceeded the Amputation of an Arm. *By Mr* Daniel Bullivant, *Surgeon at* Oakham, Rutlandſhire.

MARY BERRIDGE, of Exton in the county of Rutland, made application to me ſome time in the year 1769, to relieve her of a contraction in the right fore-arm. This complaint had been brought on by the arm being kept too long in one poſition, when ſhe was ſewing; and had made its appearance about ten years before, during which time various means had been made uſe of to relieve her, but without any effect. On examination, I found the right fore-arm compleatly contracted, the hand being brought cloſe to the pectoral muſcle. The biceps flexor cubiti muſcle was, as if in a ſtate of action, ſhortened, and extremely rigid, and was evidently the ſole cauſe of the contraction. As ſuch a variety of methods had been uſed, I judged it would be

fruitleſs to make any more trials in the ſame way, but imagined a diviſion of the muſcle, ſimilar to that which is uſed in the wry-neck, might be attended with ſome benefit. Accordingly, the operation was performed in the following manner: I made an inciſion through the common integuments, on each ſide of the lower part of the contracted muſcle, and paſſed a probe in at one orifice, and out of the other. The torniquet which had been applied, was then looſened, and the muſcle being compreſſed on the probe, I could feel the pulſe beat diſtinctly in the wriſt. I took this method in order to avoid wounding the humeral artery. The muſcle was then divided on the probe. The haemorrhage that enſued was trifling, and the bleeding ſoon ſtopped, without any ligature. The arm could now be brought from its former poſition, to that of a right angle; ſo that I was flattered with the hope of ſucceeding to my wiſh; but it was unfortunate, that, from the long continuance of the contraction, the ſinovia of the elbow-joint had become ſo acrid (from ſtagnation I ſuppoſe) as to have corroded the cartilages, and even, as it appeared afterwards, to have injured the heads of the bones themſelves. Joined to this, the joint

ſwelled,

ſwelled, was exceedingly painful, and at length ulcerated. The lower arm likewiſe became oedematous; ſo that amputation became abſolutely requiſite in order to ſave her life, already in danger, from the weak ſtate ſhe was reduced to, from the pain and diſcharge of the ulcerated parts. Accordingly, ſome time in the ſpring 1770, I took off the arm in the uſual manner, three or four inches above the elbow. For a fortnight after the operation, nothing material enſued, except a very conſiderable diſcharge of thin matter; which, however, was beginning to leſſen, when ſhe was ſeized with moſt violent ſpaſms in the ſtump of the amputated arm. The divided muſcles, and the pectoral muſcle were principally affected, being thrown into the moſt violent agitation, as often as the ſpaſms returned, which was every four or five ſeconds, and gave her moſt excruciating pain. It is almoſt impoſſible to enumerate the different methods that were tried to relieve her, without being able to afford her the leaſt eaſe. Bark, in all its preparations, was adminiſtered in very large quantities; camphor and opium in very large and unuſual doſes, ſhe taking a dram of opium in twenty-four hours, none of which procured her the leaſt

alleviation of her pains. I have often tried the effect of compreſſing the ſtump with the torniquet, binding it exceedingly ſtrait, yet could ſcarce ever perceive the ſpaſms leſſened by it. The wound of the ſtump, during this time, though it had not a very good appearance, had gradually contracted, and would ſoon have cicatrized, when I imagined a caries of the bone might poſſibly be the cauſe of the ſpaſms. I accordingly laid the end of the bone bare by a cauſtic, and a ſmall piece exfoliated, but ſtill without any kind of benefit. I afterwards ſeparated the muſcular fibres from their connection with the edge of the bone, but ſtill with no better ſucceſs. Fruſtrated thus in all my own attempts, I drew up a ſtate of the caſe, and ſent it to Mr White of Mancheſter, and afterward to Dr Kirkland of Aſhby, for whoſe opinions I think myſelf much indebted. Their advice was ſtrictly adhered to, but ſtill with no happier effects than before.

It was now nearly two years from the commencement of my unhappy patient's ſufferings, during which time ſhe had ſcarcely ſlept an hour at a time, and frequently paſſed whole nights without a moment's reſt, and was reduced very low,

low, and much emaciated, ſo that her life was much to be deſpaired of; when it occurred to me, that there might be ſome bony fibres on the edge of the amputated bone, which, by vellicating the contiguous fibres, might throw them into contraction. I ventured then on one operation more, and, ſeparating the fibres from the bone, ſawed about half an inch of it off. On examination, I diſcovered a great number of bony fibres, with exceeding ſharp points, which had projected in every direction, and had ſhot out a conſiderable way into the contiguous parts. The wound digeſted well, and cicatrized in a very ſhort time. The ſpaſms too ceaſed from the moment the operation was performed, and ſhe never afterwards had the ſlighteſt return.

SECT. III.

Medical News.

DOCTOR Thomas Livingſton, phyſician in Aberdeen, has lately tranſmitted to Dr Duncan a caſe extracted from the journal of the Infirmary in that city, which had been the ſubject of much converſation.

This patient was an unmarried woman, about 25 years of age. When ſhe was admitted into the hoſpital, the phyſicians were informed, that, about two years and a half before that, ſhe had been affected with a ſtoppage of the menſes. This was attended with pain in the region of the kidneys and courſe of the ureters, and with difficulty in voiding her urine. Some months after this, the pains becoming more violent, and being chiefly

chiefly ſeated in the region of the uterus, ſhe diſcharged from the vagina a large hard ſtone of a reddiſh colour, with a rough ſcabrous ſurface; which ſhe ſaid ſhe was certain came from the uterus. From that time, to the day of her admiſſion into the Infirmary, which was on the 28th of March 1777, no leſs than twenty-five ſtones of the ſame kind, were either voided or extracted from the vagina by different people. Theſe ſtones were of different ſhapes and ſizes, ſome of them weighing near to three ounces, but all of them extremely hard, and reſembling iron-ſtone in colour.

At the time of her admiſſion into the Infirmary, ſhe ſeldom voided her urine without the aſſiſtance of the catheter; but, upon ſounding, nothing particular could be diſcovered in the bladder. The vagina was in its natural ſtate, and the os tincae neither more nor leſs dilated than ordinary. She remained about two months in the hoſpital, during which time, on ſeveral occaſions, ſhe complained of the pain, and other ſymptoms which preceded the diſcharge of ſtones: And, upon examination, ſtones were found ſticking in the vagina. Theſe were, as formerly, of different weights; but in colour and appearance they reſembled

reſembled calcined bricks. They were of a rough unequal ſurface and full of ſmall knobs. Even when the largeſt were extracted, the os tincae did not appear to be dilated, and no ſymptom of laceration could be diſcovered.

Theſe circumſtances gave great reaſon to ſuſpect ſome trick or impoſition. Orders were therefore given, to beſtow the ſtricteſt attention to her conduct. And, upon a careful ſearch, a ſtone was found in her pocket, and three or four in her bed, exactly reſembling thoſe which had formerly been extracted. Upon this, ſhe was directly interrogated, and at laſt confeſſed the whole to be an impoſition. She denied that ſhe had any accomplices, and declared, that neither her ſiſter, nor any of her friends, who were allowed to call for her, knew or ſuſpected her intentions. She acknowledged, that the ſuppreſſion of urine was entirely voluntary, and that ſhe called for the aſſiſtance of the catheter, in order to carry on the impoſition. Her conduct was repreſented to the directors of the infirmary by Dr Livingſton. She confeſſed her crime to them alſo, and was ordered to be diſmiſſed as an infamous impoſtor.

To

To this hiſtory, Dr Livingſton ſubjoins the following remarks:

"When I was firſt informed of this woman's ſituation, and of the nature of her pretended complaints, I muſt honeſtly acknowledge, that I was much perplexed and difficulted in forming any rational opinion of ſuch an extraordinary and uncommon caſe. She had an unblemiſhed character in the country where ſhe reſided. She never ſought for charity of the public, though ſeveral families of diſtinction ſhewed her much compaſſion, in conſequence of her fictitious diſtreſs. Before I ſaw the woman herſelf, I was informed of her ſituation, by different people, who had ſome of the ſtones in their poſſeſſion, which had been extracted from the vagina, by a midwife in the country. About the beginning of this year, ſhe went to a practitioner in the country, to whom ſhe told her ſtory, and he entertained her in his own family for ſome time, with great humanity, and extracted two very large ſtones from the vagina, which he ſhewed me afterwards. Upon converſing with him on this uncommon phaenomenon, I aſked ſeveral queſtions about the ſtate of the uterus and of the os tincae, immediately after the extraction of the ſtones; but the anſwers I received were not ſatisfactory.

ſatisfactory. When I hinted my ſuſpicions of an impoſition, he was much affronted; and ſome other people loudly exclaimed, that I had neither charity nor humanity in ſuſpecting the poor diſtreſſed woman of ſuch an intention.

I then begged ſhe might be ſent to the Aberdeen-Infirmary, where I would beſtow every poſſible attention upon her caſe, and where ſhe ſhould be treated with care and tenderneſs; and ſhe was accordingly recommended to my care, by a perſon whoſe benevolence and humanity do honour to his high rank in life.

Practitioners cannot be too cautious in forming opinions of uncommon or preternatural appearances. I was exceedingly embarraſſed about the proper manner of detecting this impoſtor; for, though I was convinced from the beginning that her aſſertions were inconſiſtent and impoſſible, yet I durſt not venture to declare my opinion, without a convincing proof of her impoſition."

* * * *

Although there be many inſtances of ſubſtances being retained, for a conſiderable time, unchanged in the ſtomach, yet we are perſuaded, that

that the following account of a late diſſection at Edinburgh, will be thought ſo ſingular, as to deſerve the attention of our readers.

A man, about fifty years of age, who had, for ſeveral months, been affected with a ſenſe of pain and oppreſſion about the præcordia, and much vomiting after taking food, attended with obſtinate conſtipation, ſwallowed two piſtol bullets, with the view of procuring a free diſcharge by ſtool. The bullets were never obſerved to be diſcharged, and his complaints were nothing alleviated. At that time a circumſcribed tumour could be diſtinctly felt, ſituated a little above the umbilicus on the right ſide.

In the this ſituation he was admitted into the Royal Infirmary. There ſeveral medicines were employed, with a view of relieving his complaints. But, after he had remained about a fortnight in the hoſpital, as his complaints became daily more ſevere, he applied to be diſmiſſed, and, about eight days afterwards, died at his own houſe.

Leave was obtained for examining into the nature of this diſeaſe, by diſſection, after death. This was accordingly done by two ſtudents of medicine, equally diſtinguiſhed for their genius and induſtry, Mr Seguin Henry Jackſon from London;

London; and Mr Samuel Byam Athill from Antigua. The former of theſe gentlemen had, with great humanity, attended this patient from the time that he left the hoſpital till his death; and had given him all the aid, of which a caſe of ſuch a deſperate nature could admit. Doctor Duncan was alſo preſent at the diſſection.

The tumor which had been felt during his life, was found to be a very conſiderable ſchirrous ſwelling of the pylorus, extending about four or five inches on the ſtomach. It had received, on the outſide, a deep yellow tinge from the bile. In the cavity of the ſtomach, beſides a conſiderable quantity of a muddy coloured fluid reſembling chocolate, which had no ſmell of foeces, the two leaden bullets were alſo found. They had now been lodged there for the ſpace of two months. To all appearance, they were not in the ſmalleſt degree changed, unleſs, perhaps, in colour; for they were rather of a more black tinge than is commonly the caſe.

The internal ſurface of the diſeaſed part had a very fungous appearance, and the adjoining parts of the ſtomach were rather horny or cartilaginous than muſcular. The paſſage between the ſtomach and inteſtines was not wider than would

would eaſily admit an ordinary gooſe-quill. The bullets could be puſhed through it when conſiderable force was exerted. But, without this, they could not be made to paſs.

This affection of the ſtomach was not the only morbid appearance. A large tumor was found lying on the ſpine. It was about four inches in length, and reached upwards to the diaphragm, being in ſome meaſure covered by its crura. From its thickneſs it nearly touched the cartilago enſiformis. By its bulk it ſeemed to have puſhed the diaphragm ſomewhat higher, and the ſtomach rather lower than natural.

On examination, it was found to be an aneuriſm of the aorta deſcendens, commencing at the diaphragm, and terminating at the caeliac artery. The vertebrae to which this aneuriſm was attached, were very ſoft, and could eaſily be cut by a diſſecting-knife, where the attachment took place.

All the other abdominal and thoracic viſcera were in their natural ſtate, except the heart, which ſeemed to be ſmall. The two morbid parts mentioned above, were given to Dr Monro, in whoſe poſſeſſion they now are.

We

* * * *

We formerly mentioned, that Dr Duncan had ſet on foot at Edinburgh, an inſtitution for giving lectures on the caſes of patients ſubjected to chronical diſeaſes, ſomewhat ſimilar to the Collegium Caſuale at Leyden. This inſtitution has furniſhed him with ſome ſingular caſes, which it is his intention to publiſh in a ſhort time. And, to each caſe, he means to ſubjoin the principal remarks which he offered, with reſpect to it, in the lecture, of which it was the ſubject.

About the firſt of November, he will begin a courſe of lectures on the theory and practice of medicine; and, at the ſame time, another courſe of lectures on the caſes of patients ſubjected to chronical diſeaſes. For the ſubject of this laſt courſe, he will ſelect the moſt important caſes which are treated at the Diſpenſary. From different conſiderations, he was formerly induced to confine the caſe-lectures ſolely to thoſe who were his pupils for the theory and practice of medicine. Thoſe, however, who incline, may, hereafter, attend the caſe-lectures alone, for the payment of a ſeparate fee; but ſuch gentlemen as are his pupils for the theory and practice, will be entitled,

as

as before, to attend the caſe-lectures, without paying any other fee than half a guinea, as medicine-money. Every ſtudent who attends the caſe-lectures on either of theſe footings, will have the liberty of attending the practice at the diſpenſary, and will have free acceſs to the journals which are kept at that charity, containing the caſes of the patients, and the ſubſequent reports.

Dr Duncan has lately erected a building, for the convenience of his claſs, on an area in the neighbourhood of the Surgeons Hall, and immediately adjoining to the hall which is the property of the Medical Society. In this building, which is intended for a medical academy, beſides a commodious teaching-room, there are ſeveral other apartments which will be appropriated to the uſe of his ſtudents in the proſecution of experimental inquiries on medical and philoſophical ſubjects.

* * * *

A new edition of the treatiſe which was publiſhed by the late ingenious Mr John Innes of Edinburgh, under the title of *A Deſcription of the Human Muſcles, chiefly as they appear on diſſection*, will ſoon be put to the preſs. Mr Innes,

during his lifetime, was at much pains in making corrections, improvements, and additions to this treatiſe. All theſe will be introduced into the edition of this work which is now to be publiſhed. And it will add not a little to the merit of this work, that his obſervations have, ſince his death, been ſubjected to the examination of a juſtly celebrated anatomiſt, from a careful peruſal by whom they can ſuſtain no injury.

* * * *

A propoſal has lately been ſet on foot for eſtabliſhing a public diſpenſary at Kelſo, for the relief of the indigent. A plan for this inſtitution has been lately printed, and diſtributed through the bounds to which it is intended that this charity ſhould extend. It is propoſed, that this inſtitution ſhall be ſupported by annual ſubſcriptions from thoſe who poſſeſs ability and inclination to do acts of beneficence. And, as thoſe who are the principal promoters of this charity are not only diſtinguiſhed for ſuch qualities, but alſo by their high rank in life, there can be little doubt, that this ſcheme will be carried into execution in the manner moſt conducive to public utility.

Dr

* * * *

Dr John Clarke phyſician in Newcaſtle, and Mr John Anderſon ſurgeon there, have lately opened a ſubſcription for eſtabliſhing a public diſpenſary at Newcaſtle, for the relief of the indigent when ſubjected to thoſe diſeaſes which, by the rules of the Infirmary at that place, cannot be admitted to the benefits of that charity. Soon after this ſcheme was ſet on foot, the phyſicians of the Infirmary opened a ſubſcription for the eſtabliſhment of a ſecond Diſpenſary, to anſwer the ſame purpoſe. The conteſt which muſt be thus produced, may probably be the means of more ample proviſion being made for the neceſſities of the poor, when afflicted with ſickneſs, than would otherwiſe be the caſe.

* * * *

An Infirmary is now building in the town of Dumfries, which cannot fail to be a great bleſſing to the indigent in that neighbourhood. When it is conſidered that no charity can be more conducive to public utility than the affording relief to the diſeaſed, how much is it to be wiſhed that eſtabliſhments of a ſimilar nature took place in

every quarter? And it is probable, that proper exertions from practitioners in medicine might be the means of producing, every where, charitable inſtitutions for the relief of the poor in ſickneſs. Wherever there is ſufficient employment for a regular practitioner among the opulent inhabitants of any country, it can hardly be doubted, that a fund might be collected, if not for the maintenance of the ſick poor, at leaſt, for ſupplying them with medicines, without incurring an expence which they are little able to defray.

* * *

Dr Daniel Rutherford and Dr James Gregory have lately been admitted fellows of the Royal College of phyſicians in Edinburgh; as have Mr James Ruſſel, Mr John Sheils, and Mr William Rae, of the College of Surgeons at that place.

SECT.

SECT. IV.

List of New Books.

A TREATISE on the management of pregnant and lying-in women, and the means of curing, but more eſpecially of preventing, the principal diſorders to which they are liable, &c. The ſecond edition, reviſed and enlarged. By Charles White, F. R. S. &c. 8vo. London.

Practical obſervations on the cure of the hectic and ſlow fevers, and the pulmonary conſumption: To which is added, a method of treating ſeveral kinds of internal haemorrhages. By Moſes Griffith, M. D. 8vo, London.

An examination of a charge brought againſt inoculation. By De Haen, Raſt, Dimſdale, and other

other writers. By John Watkinſon, M. D. 8vo, London.

Medical inſtructions towards the prevention and cure of chronic or ſlow diſeaſes peculiar to women, &c. By John Leake, M. D. member of the Royal college of phyſicians London, and phyſician to the Weſtminſter lying-in hoſpital. 8vo, London.

Oratio de re medica cognoſcenda et promovenda. Habita apud ſocietatem medicam Londinenſem die 18. Januarii, anno 1777. Auctore Nathanaile Hulme, M. D. Cui acceſſit via tuta et jucunda, calculum ſolvendi in veſica urinaria inhaerentem, ab hiſtoria calculoſi hominis confirmata. 8vo, London.

Experimental inquiries, part third. Containing a deſcription of the red particles of the blood in the human ſubject, and in other animals; with an account of the ſtructure and offices of the lymphatic glands, of the thymus gland, and of the ſpleen; being the remaining part of the obſervations and experiments of the late Mr William Hewſon, F. R. S. By Magnus Falconer Surgeon and teacher of anatomy. 8vo, London.

Beauties

Beauties of natural hiſtory; or elements of Zoography, illuſtrated by a great variety of copperplates. 12mo, London.

A treatiſe on the uſe and abuſe of mineral waters. By Hugh Smith, M. D. 8vo, London.

A methodical introduction to the theory and practice of the art of medicine. The ſecond edition enlarged and corrected. By David M'Bride, M. D. 2 vols, 8vo, Dublin.

Diſcours ſur quelques opinions du public, concernant la medecine prononcé au mois de mars 1776 devant le college des medecins de Limoges; par M. Royer aggrégé a ce college, et docteur de la faculté de medecine de Montpellier. 12mo, Limoges.

Eloge hiſtorique de M. Vernage; par M. Maloet, docteur regent de la faculté de medecine de Paris, premier medecin de Madame Victoire et de Madame Sophie. 8vo, Paris.

Memoires ſur les diſſolvants de la pierre, avec quelques problemes de chymie, par M. Duhaume docteur en medecine. 4to, Paris.

Experiences et reflexions relatives a l'analyſe du bled et des farines, par M. Parmentier, penſionnaire

ſionnaire du Roi, maitre en pharmacie, de l'academie royale des ſciences, belles lettres, &c. de Rouen. 8vo, Paris.

Les oracles de Cos, ouvrage intereſſant pour les jeunes medecins, utile aux chirurgiens, curés, et autres ayant charge d'ames, et curieux pour tout lecteur capable d'une attention raiſonnable; par M. Aubre, M D. conſeiller medecin ordinaire du Roi, intendant des eaux minerals de Luxeuil. 8vo, Paris.

Flora Pariſienſis, ou deſcriptions et figures de toutes les plantes qui croiſſent aux environs de Paris. 8vo, Paris.

De pierres precieuſes et des pierres fines, avec les moyens de les connoitre et de les evaluer; par Dulens de la ſocieté royale de Londres, et de l'academie des inſcriptions et belles lettres de Paris. 12mo, Paris.

Obſervations ſur les maladies des negres, leurs cauſes, leurs traitments, et le moyen de le prevenir; par M. Dazille, medecin penſionnaire du Roy, ancien chirurgien-major de troupes de Cayenne, des hoſpitaux de l'Iſle de France, &c. 8vo, Paris.

Phi-

Eſſai ſur la ſanté de filles nobiles, par M. Virard. 8vo, Paris.

Traité du ſiegle ergoté, par M. Read, M. D. ſecond edition. 12mo, Metz.

Diſſertatio de ſulphure antimonii aurato liquido, auctore Erneſto Theophilo Gueriche, 4to, Erfordiae.

Diſſertatio de ſolutione aluminis vitriolata medicamento euporiſto, polychreſto. 4to, Giſſae.

D. Joannis Erneſti Neubauer, ordinis medicorum in academiae Jenenſi, H. T. Decani Deſcriptio anatomica fariſſimi peritonaei conceptaculi, tenuia inteſtina a reliquis abdominis viſceribus ſecluſa tenentis. 4to, Lipſiae.

Sylloge ſelectiorum opuſculorum argumenti medico practici, Collegit et edidit Ern. Godofr. Balduinger. Ord. Med. Gotting. Sen.; Prax. Prof.; et H. T. Academ. Pro-rector. vol. II. 8vo, Gottingae.

Diſſertationes medicae inaugurales, quas ex auctoritate reverendi admodum viri Gulielmi Robertſon, SS. T. P. Academiae Edinburgenae praefecti; nec non ampliſſimi ſenatus academici conſenſu, et nobiliſſimae facultatis medicae decreto,

creto, pro gradu doctoratus, ſummiſque in medicina honoribus et privilegiis rite et legitime conſequendis; eruditorum examini ſubjecerunt, Prid. Id. Junii 1777,

Stanhope Baynes, Anglo-Britannus, De hypochondriaſi.

Joannes Heyſcham, Anglus, De rabie canina.

Joannes Shore, Virginienſis, De fluore albo.

Thomas Ruddimannus Steuart, Scoto-Britannus, De apoplexia.

David Stuart, Americanus, De mania.

Edmundus Laycock, Anglo-Britannus, De Spiritu.

Franciſcus Claxton, ex India Occidentali, De haemorrhoide.

Georgius Bell, Britannus, De phyſiologia plantarum.

Andreas Meaſe, M. B. T. C. D. Hibernus, De cynanche tracheali.

Jacobus Melliar, Anglo-Britannus, De aſthmate ſpaſmodico.

Henricus Woollcombe, Anglo-Britannus, De hyſteria.

Ellis

Ellis Button Metford, Anglus, De colica.

Alexander M'Lenan, Scoto-Britannus, De morborum feminiis.

Jacobus M'Night, Britannus, De variola.

David Campbell, Americanus, De muſices effectu in doloribus leniendis aut fugandis.

Jacobus Murray, Britannus, De phthiſi pulmonali.

CON-

CONTENTS.

Books.

Coſte, M. Recueil des oeuvres, publies par Mr R. Mead 367
Muſgrave, Samuel, Speculations on the nerves 374
Van Doevern, Gualth. Primae lineae de cognoſcendis mulierum morbis 387
Oehme Car. Joſeph, Diſſertatio de morbis recens natorum chirurgicis 391
Weſtendorf, Jo. Criſtoph. Diſſertatio de optima acetum concentratum conficiendi ratione 395
Withers, Tho. Obſervations on chronic weakneſs 399
Societatis Medicae Hafnienſis collectanea 413
Alix. Math. Fran. Obſervata chirurgica 420
Schmucker, Joſ. Lebr. Chirurgical obſervations 424

Medical Observations.

The hiſtory of a remarkable wound in the trachea and neighbouring parts, by Mr James Stark, *Surgeon in Calcutta* 434
The hiſtory of a puerperal affection terminating in a diſcharge of pus from the umbilicus, by Mr

Mr James Carmichael *Surgeon at Port-Glaſgow* 445

Caſe of violent ſpaſms which ſucceeded the amputation of an arm, by Mr Daniel Bullivant, *Surgeon at Oakham, Rutlandſhire* 447

MEDICAL NEWS 452

LIST OF NEW BOOKS 465

INDEX.

INDEX.

A

Pag.

ABdomen of infants, diviſion of, by Mr Portal 152
Acid of ſugar, account of 255
——— its effects on metallic ſubſtances 262
——— its elective attractions 264
——— its effects on different calcareous ſubſtances 260
Age, when high operation for lithotomy moſt proper 156
Albinus's plates, a new and cheap edition by Mr Andrew Bell 243
Alix Math. Fran. Med. et Chir. Doct. obſervata chirurgica 420
Amputation, ſpaſms from 447
Anderſon, Mr William, account of cabbage-tree bark as an anthelmintic 84
Animal fluids, concluſions from Dr Darwin's experiments 38
Arſenic, approved remedy for the radical cure of cancer 55
——— its doſes in cancer 56
——— courſe to be followed while taking it for cure of cancer 58
Arvidſon, J. A. on the acid of ſugar 255
Aſthma, an uncommon caſe of 198

Aſthma, bliſters good in it 307
Athill, Mr Samuel, Diſſection of a patient in whoſe ſtomach were found two piſtol bullets 456

B

Bark, Peruvian, aggravates ſymptoms from punctured nerve 217
Bees, ſome curious obſervations concerning them 350
Bell, Mr Andrew, new edition of Albinus's plates 243
Bent, Mr James, account of cutting of the head of the os humeri 40
Bertin, M. on children born without an anus 164
Black, Dr Joſeph, his experiments on quick-lime 245
Bladder, diſtention of, one of the moſt uſual cauſes of retroverted uterus 176
Blagden, Dr. his experiments and obſervations in a heated room 265
Bleeding on back of hand abated ſevere ſymptoms in a caſe of punctured nerve 219
Bliſters, much adviſed in caſes of topical inflammations 307
Bliſters good or bad in convulſions, according to cauſes 309
Blood, influence of the nerves in altering its appearance 383
Botanical garden at Jamaica, account of 352
Breaſt, obſervations on the diſeaſes of it 430
Brown, Dr. no good from rad. columb. in dyſentery 236
Brownrigg, Dr, experimental inquiry 43

Bullivant, Mr. Dan. ſpaſms from amputation 447
Butterflies, effects of electricity on their ova 137

C

Cabbage, ſour, uſe againſt ſcurvy 319
Camphor, its effect in morbus niger 208
Cancer, remedy for radical cure 54
Carmichael, Mr James, hiſtory of a puerperal affection 445
Cartilages unaltered where bones entirely loſt their ſolidity 196
Cartilages, or bones covered with cartilages in the knee-joint 343
Cataplaſm, bad in caſe of punctured nerve 217
Cicuta, method of adminiſtering it 292
Children born without anus, owing to four different cauſes 165
Chirurgical obſervations, by Dr Alix. 420
Chronic weakneſs, obſervations on 399
Collin, H. J. on the effects of cicuta 291
Columb. rad. no uſe in dyſentery 236
Conception, the theory of 67
Cortex eleuther. no uſe in dyſentery 236
Coſte, M. oeuvres de M. Mead 367
Cruikſhank, Mr William, his remarks on a diſeaſe of the joints 342
Cullen, Dr William, inſtitutions of medicine, Part. I. 243
——— —— firſt lines of the practice of phyſic Vol. I. 244
——— ——— on the means of producing cold 245

Cullen, Dr William, elected a member of the medical ſociety of Paris 348
——————— elected a member of the medical ſociety of Copenhagen 413

D

Darwin, Dr Eraſmus, his experiments on animal fluids 34
Deaſe, Mr William, his obſervations on venereal warts 335
De Limbourg, Dr. his letter to Dr Simmons, with ſome curious remarks 348
Diſeaſes produced and cured by the nervous ſyſtem 376
Diſpenſary at Edinburgh, propoſal for 356
Doctors of medicine created at Edinburgh, in June 1776 122
——— in September 1776 248
——— in June 1777 469
Duncan, Dr Andrew, concluſion of his lectures in the Royal Infirmary 94
——— his addreſs to the ſtudents of medicine at Edinburgh 244
——— heads of his lectures on the theory and practice of medicine 244
——— the nature of his caſe lectures on chronical diſeaſes 355
——— his propoſal for eſtabliſhing a public Diſpenſary at Edinburgh 356

Duncan, Dr Andrew, elected a member of the medical ſociety at Copenhagen 413

——— medical lectures 469

E

Eaſon, Dr. his account of the effects of lightning in curing tumor of the breaſt 82

Eggs, effect of electricity on them 133

Electricity, modes of communicating it 134

——— effects upon plants 137

Experiments, how to be made on the torpedo 53

F

Finney, caſe of extirpation of a polypous excreſcence from the os uteri 228

Fluids, their dependence on the ſtate of the nerves 382

Fomentations, bad effect in punctured nerve 217

Fordyce, Dr. his experiments in a heated room 267

Fothergill, Dr. caſe of hydrophobia 179

Fruit, too much of it cauſe of worm-fever 284

Fyfe, Mr Andrew, diſſector to University of Edinburgh 242

G

Garthſhore, Dr. caſes of retroverted uterus 173

Glandular ſwellings, great uſe of cicuta in them 299

Gregory, Dr James, appointed Profeſſor of Inſtitutions at Edinburgh 99

Guthrie, Mr Matthew, account of curious ſtone 239

H

Hamilton, Mr Alexander, elements of midwifery 61
Havnienſis ſocietatis medicae collectanea 413
Head, obſervations on the diſeaſes of it 425
Heiſter's anatomy, new edition 245
Hill, Mr James, his account of a large prolapſus uteri 88
Hope, Dr John, his new ſyſtem of botany 117
——— letter from Dr Brown 236
——— recommendation of a ſuperintendant to the botanical garden at Jamaica 354
Hiccough, very troubleſome and obſtinate 198
Hunter, Dr, his remarks on retroverted uterus 173
Hunter, Mr John, opinion reſpecting the inflammation of veins corroborated 224
——— his method of extracting preternatural pieces of bone from the knee 345
Hume, David, his death 116
Hydrophobia, ſpontaneous 369
——— moſt probable cure of 189
Hygrometer, a curious ſtone forming one 240

I

Infancy, diſeaſes of 391
Inciſion deeper than lancet could go, of ſervice in cure of punctured nerve 221
Innes, Mr John, of Edinburgh, ſome account of 232
Ipecacuanha effluvia of, cauſes aſthma 76
Jackſon, Mr Henry, diſſection of a patient whoſe ſtomach contained two piſtol bullets 456
James, Dr Robert, his death 116
Jaundice, occurring in Middleburg fever very dangerous 148

K

Koeſtlin, Carolus, on the effects of electricity 131

L

Lavater, J. C. Fragments of phyſiognomy 11
Le Febure, G. R. remedy for the radical cure of cancer 54
Levret's practiſe when the anus is ſtopped by a thin membrane or fleſhy ſubſtance 166
Lightning, its effects on a tumor of the breaſt 82
Livingſton, Dr Thomas, detection of an impoſtor 452

M

Malt, uſe againſt ſcurvy 314
Marcard, Dr. his account of the congelation of quickſilver 107
——— caſe of morbus niger 203
Mead, D. French tranſlation of his works, by Dr Coſte 367
Medical ſociety at Edinburgh, diſcourſe on opening their new Hall 112
Menſtrual diſcharge, the doctrine of 63
Meza, Dr. of the bad and good effects of bliſtering 300
Mind, relation of phyſiognomy to 16
Morand on the marriages, deaths, and births at Paris from 1709 to 1770 160
Morbus niger, by Dr Marcard 203
Morgagni, J. B. ſome account of him 94
Muſgrave, Dr Samuel, ſpeculations on the nerves 377
——— on the worm-fever 285

Nairne,

N

Nairne, Edward, his experiments on the water procured from the melted ice of ſea-water 275
Nerve punctured in phlebotomy, caſe by Mr Sherwen 210
—— ſpeculations on 377
Nervous fever, bliſters of great ſervice in it 309

O

Oehme, Carol. Joſ. de morbis recentium natorum chirurgicis 391
Os humeri, carious, method of cutting it off 41

P

Pelvis more capacious below and narroweſt above, moſt ſubject to retroverted uterus 175
Percival, Dr. extract of a letter from him 110
Piſtol bullets taken from the ſtomach on diſſection 456
Plants, effect of electricity on their germination 137
Polypous excreſcence extirpated by knife. 229
Prolapſus uteri, with ſeveral extraordinary circumſtances 88
Portal, obſervations on the ſituation of the viſcera of infants 152
Pringle, Sir John, on the means of preſerving the health of ſeamen 310
Pulſe, doctrine of, reſemblance to phyſiognomy 18
Phyſiognomy, fragments of 12
Phyſiognomy, arguments againſt 22
Phyſiognomy, maxims guiding Lavater 28

Quick-

Q

Quick-silver, the effects of its mixture with snow and salt 108

R

Raymond, Jo. his description of the autumnal fever arising at Middleburgh 140

Retroverted uterus, cases of, by Dr Garthshore, Mr Hooper, and Mr Bird 173

——— cure of 177

Rue and wormwood, fomentations strongly advised for worm-fever 288

Rush, Benj. asthma from uncommon cause 198

S

Salt-water, dipping in hydrophobia not useful 180

Schmucker, Johan. Lebrecht, on wounds and diseases of the head 425

——— on disorders of the breast and abdomen 430

Scurvy, great use of cicuta in it 299

Scott, Dr. of Stamford, account of violent asthma from effluvia of ipecacuanha 75

Scott, Dr William, of Hawick, his account of singular effects from a slight wound in the thigh 333

——— account of fatty substances voided by stool 334

Sea-water, experiments on the ice of 275

Shaving, alarm it gives in hydrophobia 186

Sherwen, Case of puncture of a nerve in phlebotomy 210

Simmons, S. F. effects of blue vitriol externally applied 75

Simmons, Dr. his letter respecting bees 350

Sour krout, great use in scurvy 237

Spa water, experiments on 43
Spaſms ſucceeding amputation 447
Stark, Mr James, hiſtory of a remarkable wound of the throat 430
Stomach, piſtol bullets retained in it for two months 456
Stomach of infants, ſituation of it 154
Stone, a curious one with two determined points of moiſture and dryneſs 240

T

Tart. emet. found moſt uſeful remedy in dyſentery 237
Temples, ſtiffneſs in, and uneaſineſs when opening the mouth from puncture of a nerve 215
Thompſon, Henry, account of ſoft bones 191
Torpedo, account of ſome on the coaſt of England 49
Throat, remarkable wound of 430
Tumour compreſſing windpipe, cauſe of aſthma 200

U

Uterus, ſtones pretended to be diſcharged from 452

V

Van Doevern, Dr. De mulierum morbis. 387
Van Swieten, practice when anus is entirely wanting 167
Veins, contractile power regulated by the influence of the nerves 377
Venereal warts, ſome remarks on them 336
Venereal diſeaſe, probable cauſe of ſoft bones 193
Vinegar, concentration of 395
Vitr. ammon. uſeful in dyſentery 237

W

Warm bath, relief in hydrophobia 187
Water, freſh, want of, cauſe of Middleburgh fever 144
Walſh, Mr John, account of torpedoes on the coaſt of England 49
Weſtendorf, Jo. Chriſtoph. de optima acetum concentratum conficiendi ratione 395
White, Dr. caſe of hieranoſos 326
Withers, Dr. obſervations on chronic weakneſs 399
Women, diſeaſes of 387
Worm-fever, why difficultly cured 283
——— principal part of cure by external applications 287
Worms, the effect of the cabbage-tree bark in curing them 85

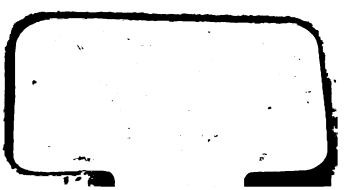
Y

Young, Dr Diſſertatio de lacte 244

Z

Zinc, flowers of, uſe in caſe of hieranoſos 326
Zinc, flowers of, applied to ſordid ulcers from gunſhot wounds, and other cauſes 283

FINIS.

ERRATUM.

Pag. 454. *for* directly *read* ſtrictly.